

### The Preferred Choice

www.scco.co.kr



In our age in which, almost daily, new technologies led by "fine ceramic" are opening new era which only yesterday would have seemed untouchable dream.

"Fine ceramic is the key to a new era of technology"

At Shinhan Ceramic, our expertise in fine ceramic has allowed us to take the responsibility of opening this new era with advanced technology.

# S.C.C.<sup>®</sup>

The Preferred Choice

## Advanced technology in fine ceramics!



#### HEAD OFFICE & FACTORY

2090-12, Jungwang-Dong (2BA 305-1, Sihwa Industrial Complex)  
Siheung-City, Kyeonggi-Do, 429-926, Korea  
T. +82 31 498 3174 F. +82 31 498 3176  
H. www.scco.co.kr E. scco@scco.co.kr

#### CHINA OFFICE & FACTORY (XIAMEN)

No. 169, Xingqian Road, Jimei District, Xiamen, 361-022, China  
T. +86 (0)592 636 1230~2 F. +86 (0)592 636 1233  
H. www.china-scc.com E. scc@china-scc.com

#### GUANGZHOU BUSINESS OFFICE

1616 Sheng Hua Ge No. 320, Shatai North Road, Guangzhou, China  
T. +86 (0)20 8727 7336 F. +86 (0)20 8727 9246  
E. yuliyong@china-scc.com



Printed May 2016





# The Ceramic Technology

The preferred choice for your future growth: Shinhan Ceramic Co., Ltd.

## Products Area

CERAMIC SEAL DISC

ENGINEERING FINE CERAMIC

SILICON CARBIDE (SiC)

CERAMIC CARTRIDGE

HEADWORK CARTRIDGE

THERMOSTATIC CARTRIDGE



## The advantage of our products

### The raw material selection

The main criteria in selecting the initial materials will be their fitness and their purity, which will contribute to the proper characteristics of the ceramic products.

### Quality Control

The quality control data is prepared for all the various items, including Surface roughness, Flatness, Parallelism, Surface contact, Firing operation Pressing operations & Individual inspection etc.

### Research & Development

To be world's premier in this field in the 21st century which satisfies the increasing and diverse desire of customers, we concentrate its R&D activities on the process development of high property products.

### Future strategy

As a corporations aiming at worlds leading ceramic manufacturer in the 21st century, Shinhan Ceramics Co., Ltd. Will continue to pure high-quality management strategies through bold R&D investment for technological advancement and active globalization drive.

Shinhan Ceramic Co., Ltd. has declared the year 1999 as its first year of second phase for long-term development plan.

Continuing its globalization drive, the company is actively participating in technological exchanges and joint ventures with benchmarked corporation in the world.

## Contents

CERAMIC SEAL DISC.....	6
ENGINEERING FINE CERAMIC.....	8
SILICON CARBIDE (SiC).....	9
<b>CERAMIC CARTRIDGE</b>	
SCC 25SR.....	11
SCC 25SF.....	11
SCC 25ER.....	12
SCC 25EF.....	12
SCC 25NR.....	13
SCC 35GR.....	13
SCC 35GF.....	14
SCC 35SR.....	14
SCC 35SF.....	15
SCC 35SR-3.....	15
SCC 35SF-3.....	16
SCC 35LR.....	16
SCC 35LF.....	17
SCC 35BR.....	17
SCC 35BF.....	18
SCC 35JR.....	18
SCC 35JF.....	19
SCC 35SMR.....	19
SCC 35SMF.....	20
SCC 35VR.....	20
SCC 35ER.....	21
SCC 35EF.....	21
SCC 35ER, A.....	22
SCC 35EF, A.....	22
SCC 38AF.....	23
SCC 38AF-CO.....	23
SCC 38AF-3.....	24
SCC 38EF.....	24
SCC 38EF-CO.....	25
SCC 38EF, A.....	25
SCC 38EFA-CO.....	26
SCC 40SR.....	26
SCC 40SF.....	27
SCC 40SMR.....	27
SCC 40SMF.....	28
SCC 40SR-3.....	28
SCC 40SF-3.....	29
SCC 40LR.....	29
SCC 40LF.....	30
SCC 40BR.....	30
SCC 40BF.....	31
SCC 40JR.....	31
SCC 40JF.....	32
SCC 40AR.....	32
SCC 40AF.....	33
SCC 40ER.....	33
SCC 40EF.....	34
<b>DIVERTER CARTRIDGE</b>	
SCC 25DP.....	36
SCC 25DD-1.....	36
SCC 25D-2W.....	37
SCC 29D/DS.....	37
SCC 31D-2W.....	38
SCC 35D-3W.....	38
SCC 35D-2W.....	39
SCC 40D-4W (3W, 5W).....	39
<b>HEADWORK CARTRIDGE</b>	
SCC S1015-RO.....	42
SCC S1015-SO.....	42
SCC S1030-KO.....	43
SCC S1062-NO.....	43
SCC S1062-TO.....	44
SCC S1087-OO.....	44
SCC S1091-SO.....	45
SCC S1015-PO.....	45
SCC S1030-PO.....	46
<b>THERMOSTATIC CARTRIDGE</b>	
SCC TH100.....	49
SCC TH200.....	49
SCC TH300.....	50
SCC TH800.....	50
SCC TH100P.....	51
SCC TH700.....	51



S.C.C. continuously endeavoring to be the best company by world class technology and transparent management.

S.C.C. concentrate Research & Development by continuous challenge mind and creative idea.

S.C.C. who's grown up as a global partner, will make their technology to be world standard as a leading company in ceramic and material provider.

Appreciate of your continuous support and encouragement to S.C.C.

## New Challenge from Innovation !

Shinhan Ceramic Company S.C.C. innovates itself to be a world top-class special material provider by challenge and innovation.



### “Why Choose Shinhan as their Partner?”

Shinhan Ceramic has contributed all its effort to the development of inorganic materials industry since 1993. On the basis of the accumulated inorganic materials technology, knowledge and our advanced materials, Shinhan initiates Fine ceramics, High alumina and Metallized products for various industrial customers.

Shinhan Ceramic Co. Ltd. has been in existence for the short time but its achievements has been remarkable as we now possess high state of confidence in the field of industrial ceramic.

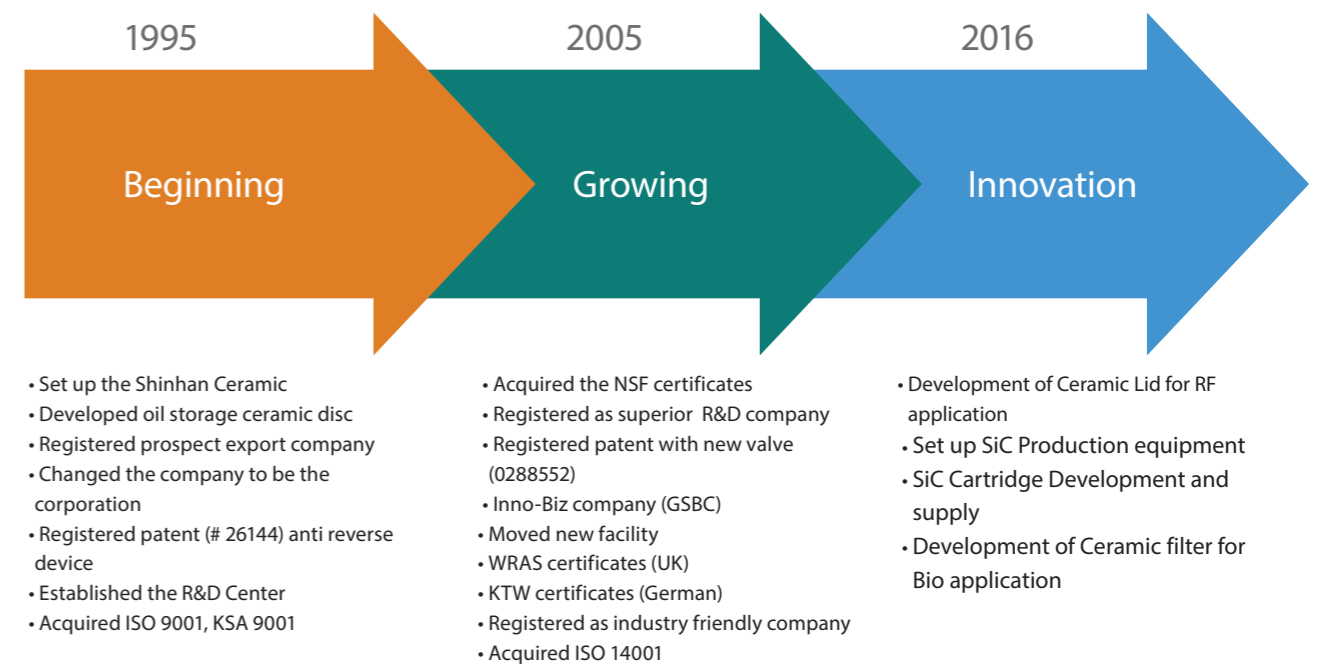
It is our desire to advance into the world's premier fine ceramic manufacturer by responding to the expectations of customers and the need of futures.

We believe that our future rests with making the best even better, and that includes our commitment to customer support and service.

We hope you feel that confident in expanding your future growth with our company and sincerely hope to serve you in the near future.

A detailed information on our company with special focus on this field business is given here for your evaluation.

### Company History





# CERAMIC SEAL DISC

S.C.C® ceramic discs work marvelously in the ceramic cartridge for sanitary fittings leaving no trouble more than 500,000 cycles use



S.C.C® seal disc in oxide ceramics show no measurable wear when used on all kinds of lever and mixers with turning mechanism.

## Ceramic disc for ceramic cartridge



Exact control and optimum sealing are ensured for 500,000 cycles operation periods due to the chemical inertness and great hardness of the ceramics.

Single lever mixer containing S.C.C® seal disc allows maintenance-free in life time.

## Ceramic disc for ceramic headwork



The excellent sliding properties of oxide ceramics are an assurance of trouble-free functioning and good durability

Twin lever mixer containing S.C.C® seal disc shows no measurable wear in using 500,000 cycles.

## The properties of ceramic seal disc

### Density

Density plays an important role because it is related to the wear. The raw material refined by spray dryer is foamed by multiple foaming press.

### Flatness

The permanent flatness and smoothness of the disc faces guarantee an excellent sealing performance.

**A special characteristics of S.C.C®** Alumina(SP-96) sealing and control discs are pocket-shaped pores in the sealing faces, which act as lubricant reservoirs and guarantee an uniform lubricant film for easy operation.

### Operation life

Test proved that even after 500,000 cycles use S.C.C® cartridge found no obstacle in normal function.

### Flatness

S.C.C standard Flatness :  $F \leq 0.6\mu\text{m}$



### SBA

S.C.C standard range :  $50\% \leq \text{SBA} \leq 80\%$



SBA : 64%

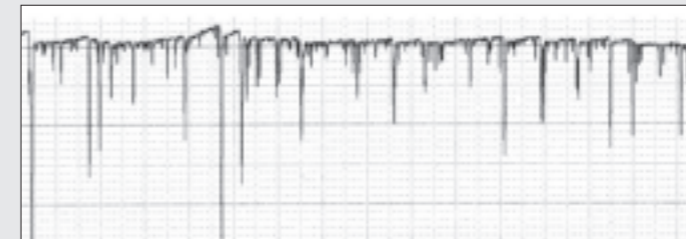
Roughness : Ra0.186

SBA : 65%

Roughness : Ra0.154

### Roughness

S.C.C standard Roughness :  $0.1 \leq \text{Ra} \leq 0.3$



Cut off	0.8mm
Tilt cor	FLAT · ML
Length	4.00mm
V-Mag	10000
H-Mag	50
T-Speed	0.3mm/s
Polarity	Positive
Ra	0.16
Rmax	4.04

## Material Properties

		SP-96	SP-99.8
Material	%	Al <sub>2</sub> O <sub>3</sub> -96	Al <sub>2</sub> O <sub>3</sub> -99.8
Density	g/cm <sup>3</sup>	3.72	3.94
Water Absorption	%	0	0
Gas Permeability	%	0	0
Bending Strength	MPa	330	420
Pressure Resistance	MPa	3400	4000
Modulus of Elasticity	GPa	330	390
Hardness HV 10		1100	1680
Surface Roughness Ra	μm	0.2	0.1
Surface Contact Area Ratio t <sub>a</sub> (Optically Measured)	%	60 ≤ t <sub>a</sub> ≤ 80	≥ 85
Mean Specific Thermal Capacity (20~100°C)	KJ/kgK	0.9	0.9
Thermal Conductivity (20~100°C)	W/mK	24	28
Coefficient of Linear Expansion (20~200°C)	10 <sup>-6</sup> K <sup>-1</sup>	5.4	6
Thermal Shock Resistance Δ T (Depending on Geometry)	°C	250	200



# ENGINEERING FINE CERAMIC

Alumina Ceramic are very valuable as electrical materials because of their insulating strength and small dielectric loss.

As industrial awareness of advanced materials increase, the number and variety of application areas of Engineering Fine Ceramic expands rapidly. Shinhan ceramic receives growing demand every year from various industrial fields because Engineering Fine Ceramics have such excellent properties as heat resistance, light weight, insulation and super hardness.

## Main Products

- Ceramic tubes
- Surge arrester tubes
- Metallized products
- Shaft & bearing for pump



Shinhan ceramic produces metallized components offering multiple alloy combinations. Many types of ceramics are amendable to the additions of metallizing coatings.

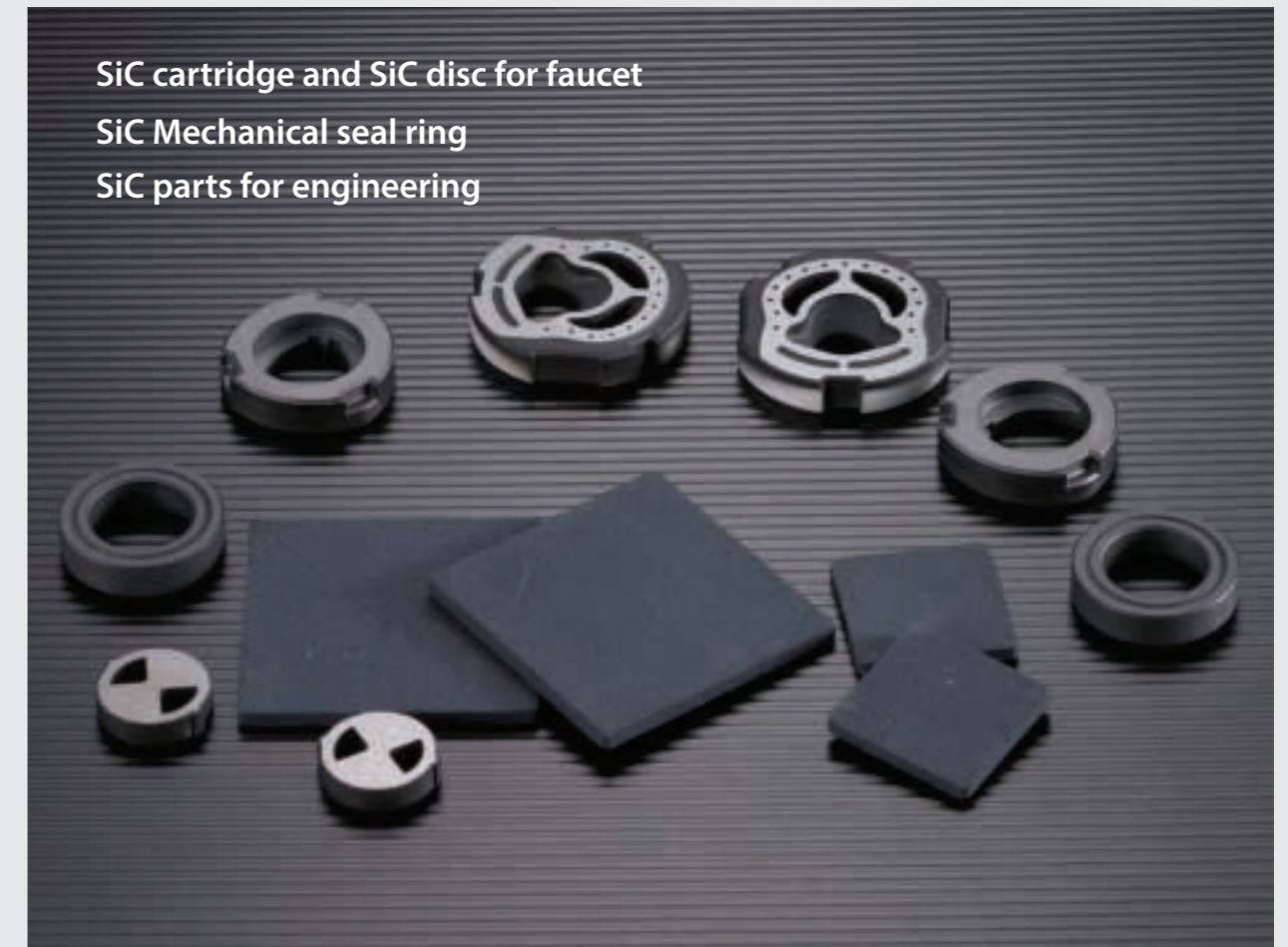


Some ceramic bodies more readily accept additions than other, The 90~96% Alumina most readily accept any of the refractory metallizing process coatings.



Alumina ceramics are inert and therefore are highly resistant to chemical attack. In addition, Ceramic is almost unaffected by water, solvents, salt solutions, and molten salt. The corrosion resistance of high alumina ceramics is generally superior for superior metals, plastics.

# SILICON CARBIDE (SiC)



SiC cartridge and SiC disc for faucet  
SiC Mechanical seal ring  
SiC parts for engineering

Valve disc, Sliding bearing, Ball media, Armor plate, Heat sink

SiC ceramics are used for high quality which required of high hardness, high wear resistance, low coefficient of friction, high thermal conductivity, chemical resistance, high strength, etc. Its application is for automobiles, oil chemicals, environments, energies, electric-electronics, mechanics, national defenses, etc.

Property	Unit	Value
Density	g/cm <sup>3</sup>	3.11~3.15
Purity	%	99.2
Hardness Hv(0.5)	kg/mm <sup>2</sup>	2,450
Flexural Strength	MPa	440
Fracture Toughness	MPam <sup>1/2</sup>	3.6
Elastic Modulus	GPa	410
Thermal Expansion Coeff.	10 <sup>-6</sup> /°C	4.4
Thermal Conductivity	W/mK	115



## CERAMIC CARTRIDGE

### ECO CARTRIDGE(Energy Saving)

It discourages hot water use in favor of energy saving  
It flows out only cold water in the middle of handle

### WATER SAVING CARTRIDGE

3-STEP, 2-STEP

### SIC CARTRIDGE

Silicon Carbide (SIC) improves the durability of cartridge and have self-lubricative

### DLC (Diamond like carbone coated) CARTRIDGE

DLC Coating maintains low torque and inside water pressure endurance in the poor water quality enviroment

### JOYSTICK CARTRIDGE

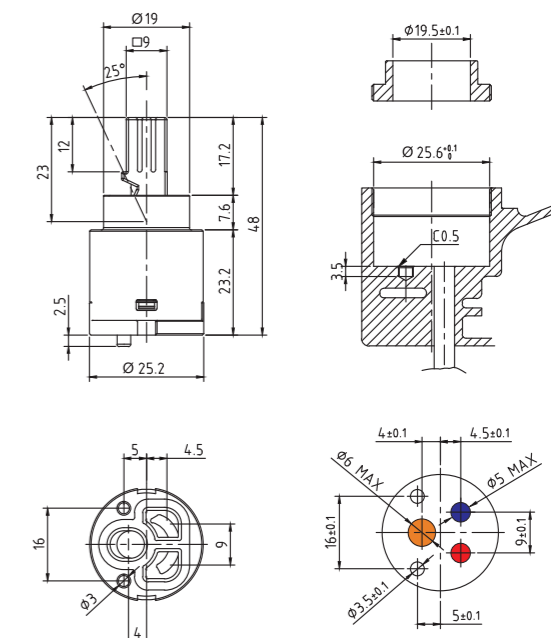
It applied basic design method of lever innovatively, so it can be adapted to various kinds of faucets

### SCC 25SR

### 25mm Ceramic Cartridge



Dimensions (in mm)



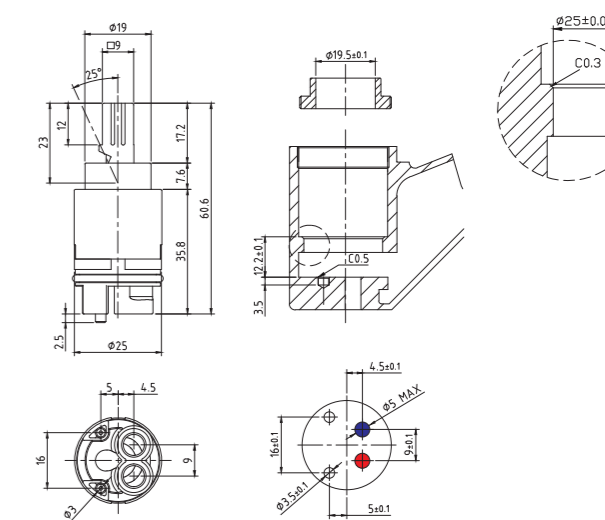
Max. Opening Angle	25°	
Max. Turning Angle	100°	
Nut Torque	8 ~ 9 Nm	
Water Resistance Pressure	Max. 25bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	6.8~7.5 ℓ/min
	(at 2bar)	8.8~9.4 ℓ/min
	(at 3bar)	10.5~11.0 ℓ/min
Endurance Test	500,000 cycle	

### SCC 25SF

### 25mm Ceramic Cartridge



Dimensions (in mm)



Max. Opening Angle	25°	
Max. Turning Angle	100°	
Nut Torque	8 ~ 9 Nm	
Water Resistance Pressure	Max. 25bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	6.8~7.5 ℓ/min
	(at 2bar)	8.8~9.4 ℓ/min
	(at 3bar)	10.5~11.0 ℓ/min
Endurance Test	500,000 cycle	



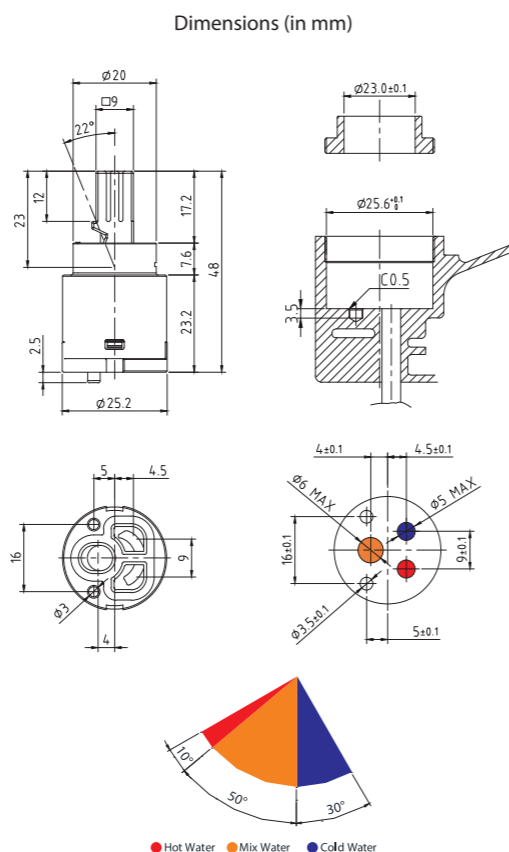
# S.C.C.<sup>®</sup> CARTRIDGE

**NEW** SCC 25ER

25mm Eco Ceramic Cartridge



Max. Opening Angle	22°	
Max. Turning Angle	60°/30°	
Nut Torque	8 ~ 9 Nm	
Water Resistance Pressure	Max. 25bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	3.0~4.0 ℓ/min
	(at 2bar)	4.5~5.5 ℓ/min
	(at 3bar)	5.8~6.6 ℓ/min
Endurance Test	500,000 cycle	

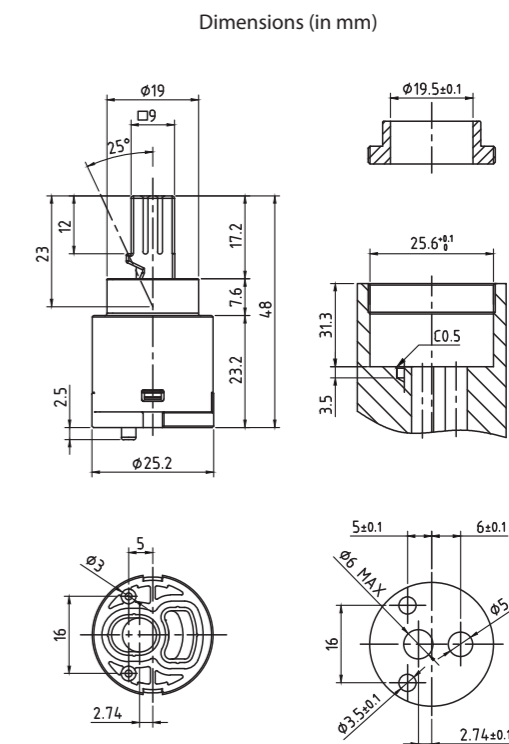


SCC 25NR

25mm Ceramic Cartridge(ON/OFF)



Max. Opening Angle	25°	
Nut Torque	8 ~ 9 Nm	
Water Resistance Pressure	Max. 25bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	9 ℓ/min
	(at 2bar)	13 ℓ/min
	(at 3bar)	16 ℓ/min
Endurance Test	500,000 cycle	

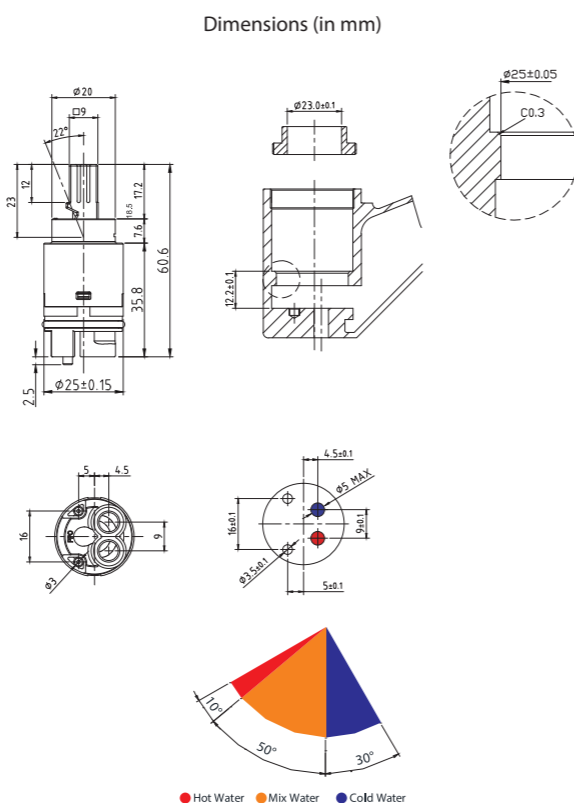


**NEW** SCC 25EF

25mm Eco Ceramic Cartridge

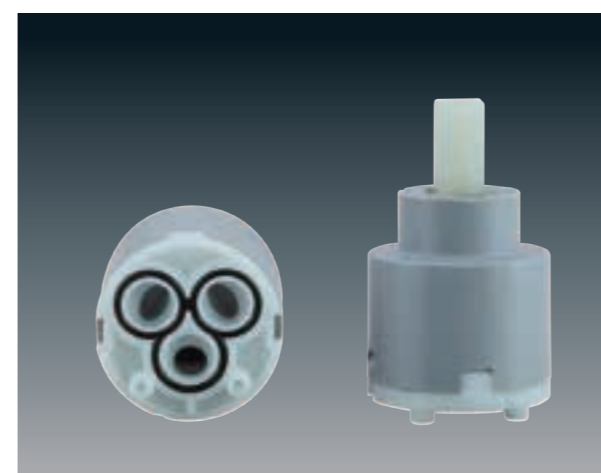


Max. Opening Angle	22°	
Max. Turning Angle	60°/30°	
Nut Torque	8 ~ 9 Nm	
Water Resistance Pressure	Max. 25bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	3.0~4.0 ℓ/min
	(at 2bar)	4.5~5.5 ℓ/min
	(at 3bar)	5.8~6.6 ℓ/min
Endurance Test	500,000 cycle	

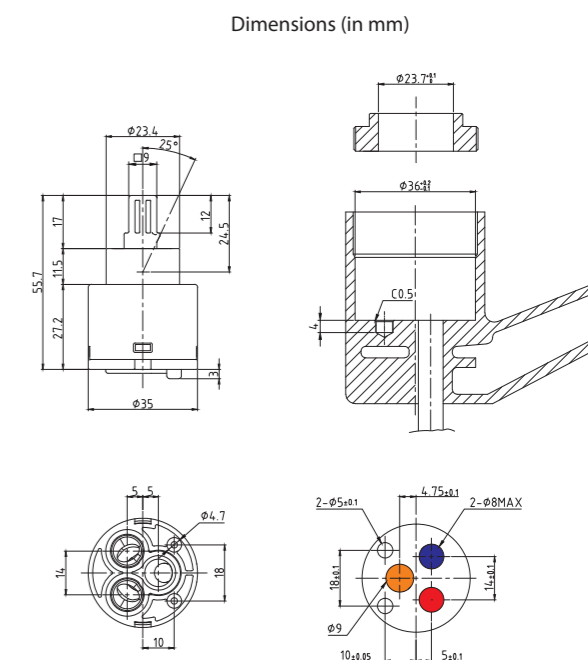


**NEW** SCC 35GR

35mm Ceramic Cartridge



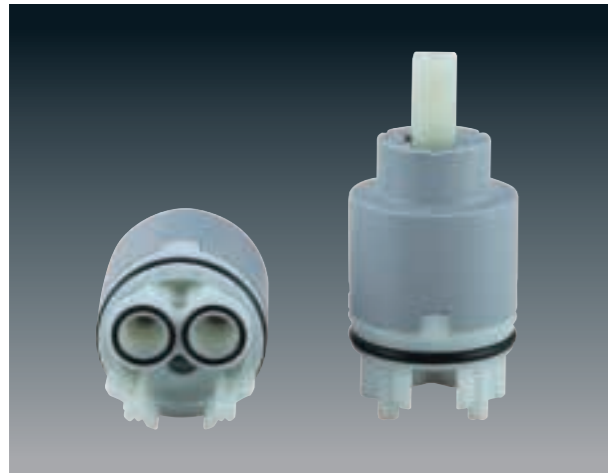
Max. Opening Angle	25°	
Max. Turning Angle	90°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	12~13 ℓ/min
	(at 2bar)	17~19 ℓ/min
	(at 3bar)	20~28 ℓ/min
Endurance Test	500,000 cycle	



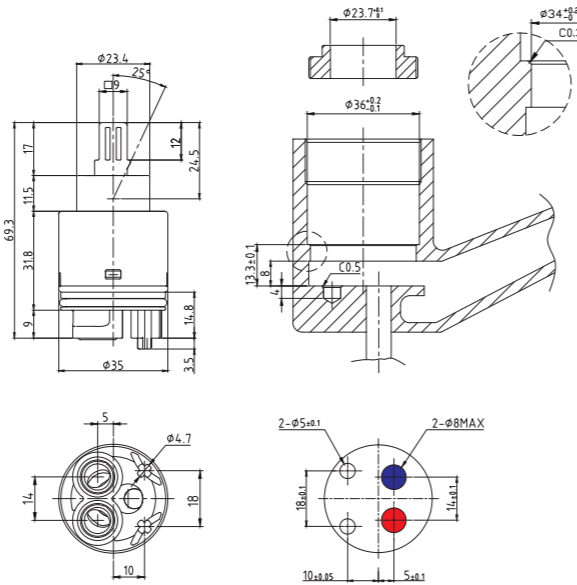
# S.C.C.® CARTRIDGE

**NEW** SCC 35GF

35mm Ceramic Cartridge



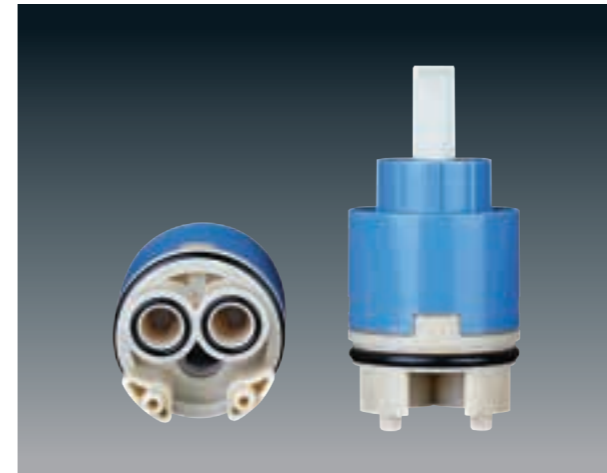
Dimensions (in mm)



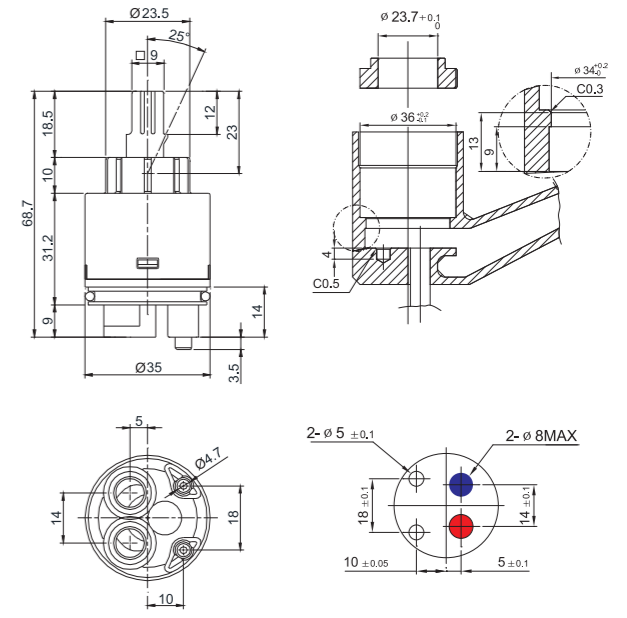
Max. Opening Angle	25°	
Max. Turning Angle	90°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	12~13 l/min
	(at 2bar)	17~19 l/min
	(at 3bar)	20~ 28 l/min
Endurance Test	500,000 cycle	

SCC 35SF

35mm Ceramic Cartridge



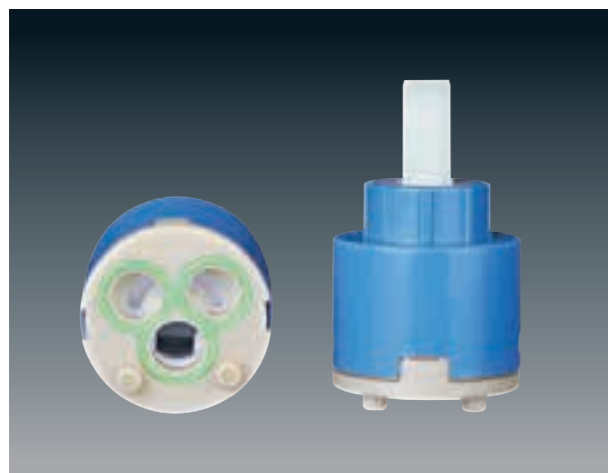
Dimensions (in mm)



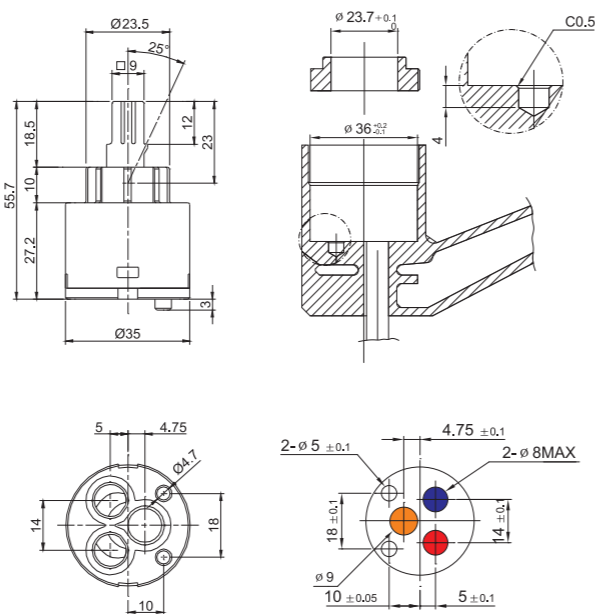
Max. Opening Angle	25°	
Max. Turning Angle	100°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	12~13 l/min
	(at 2bar)	17~19 l/min
	(at 3bar)	20~28 l/min
Endurance Test	500,000 cycle	

SCC 35SR

35mm Ceramic Cartridge



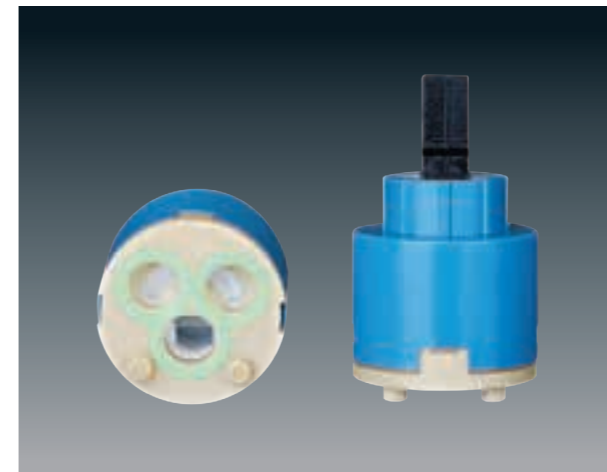
Dimensions (in mm)



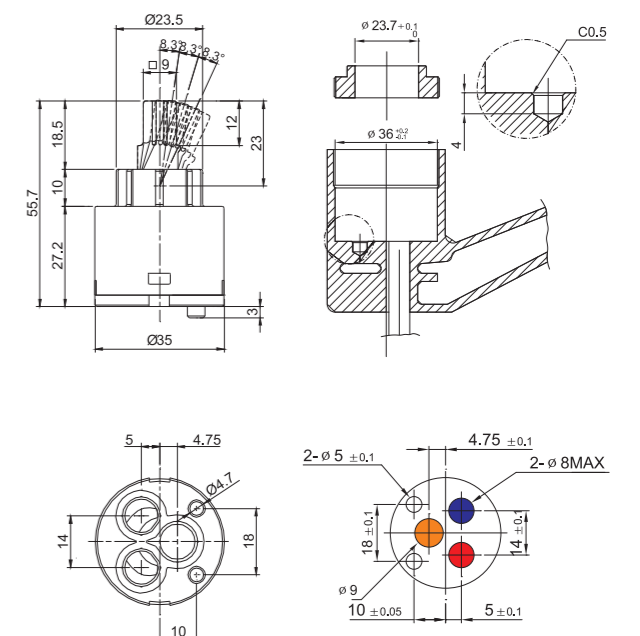
Max. Opening Angle	25°	
Max. Turning Angle	100°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	12~13 l/min
	(at 2bar)	17~19 l/min
	(at 3bar)	20~28 l/min
Endurance Test	500,000 cycle	

SCC 35SR-3S

35mm Ceramic Cartridge (3step)



Dimensions (in mm)

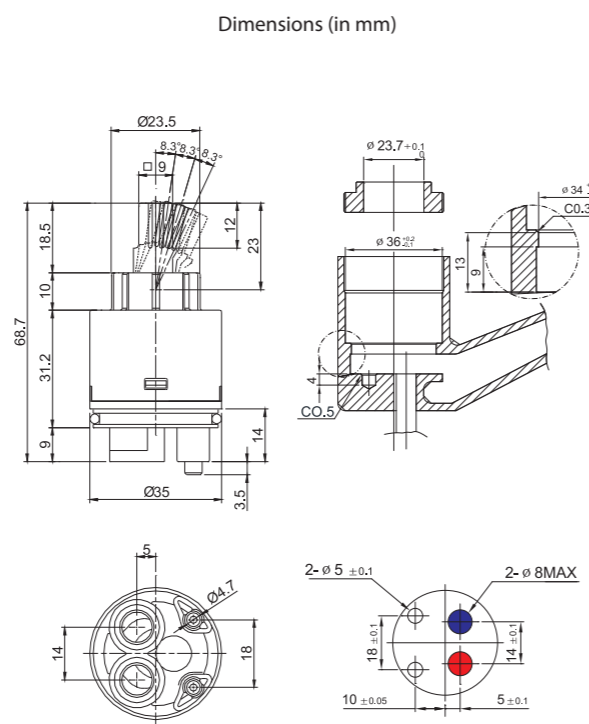


Max. Opening Angle	25°	
Max. Turning Angle	100°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	12~13 l/min
	(at 2bar)	17~19 l/min
	(at 3bar)	20~28 l/min
Endurance Test	500,000 cycle	



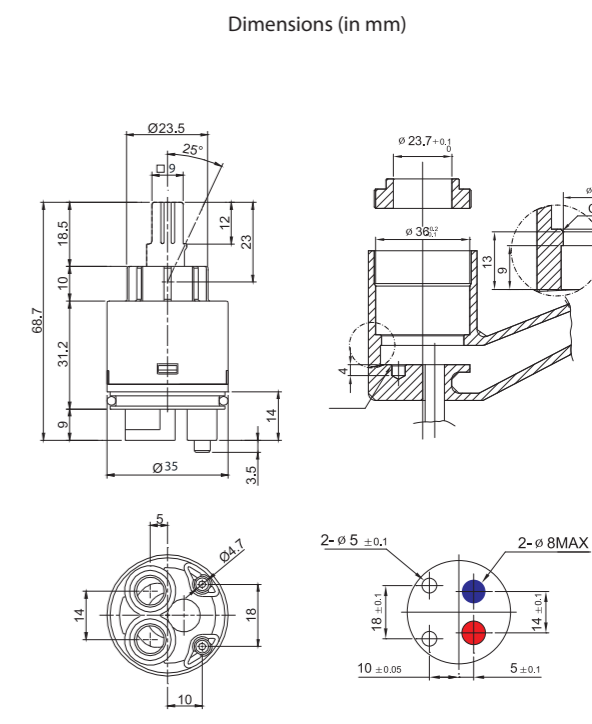
# S.C.C.<sup>®</sup> CARTRIDGE

## SCC 35SF-3S 35mm Ceramic Cartridge (3step)



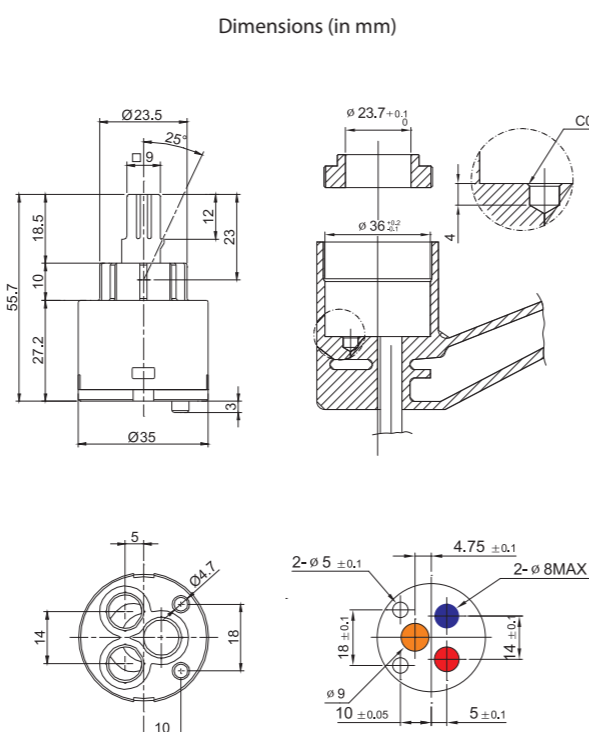
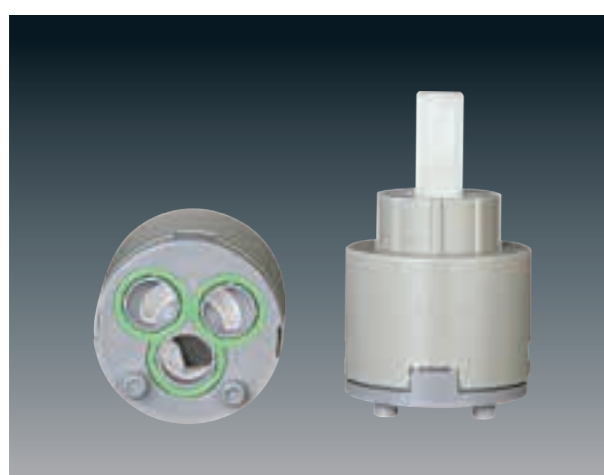
Max. Opening Angle	25°	
Max. Turning Angle	100°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	12~13 l/min
	(at 2bar)	17~19 l/min
	(at 3bar)	20~28 l/min
Endurance Test	500,000 cycle	

## SCC 35LF 35mm Ceramic Cartridge



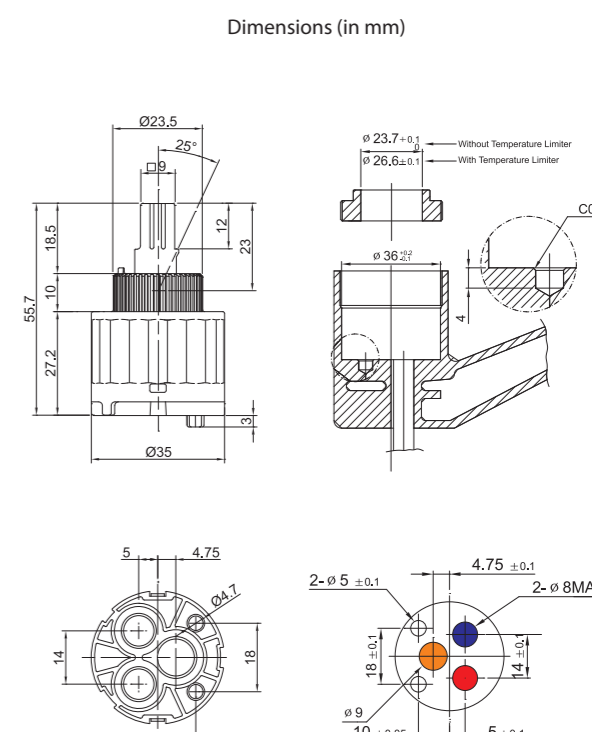
Max. Opening Angle	25°	
Max. Turning Angle	100°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	12~13 l/min
	(at 2bar)	17~19 l/min
	(at 3bar)	20~28 l/min
Endurance Test	500,000 cycle	

## SCC 35LR 35mm Ceramic Cartridge



Max. Opening Angle	25°	
Max. Turning Angle	100°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	12~13 l/min
	(at 2bar)	17~19 l/min
	(at 3bar)	20~28 l/min
Endurance Test	500,000 cycle	

## SCC 35BR 35mm Ceramic Cartridge (temperature control)



Max. Opening Angle	25°	
Max. Turning Angle	100°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	12~13 l/min
	(at 2bar)	17~19 l/min
	(at 3bar)	20~28 l/min
Endurance Test	500,000 cycle	

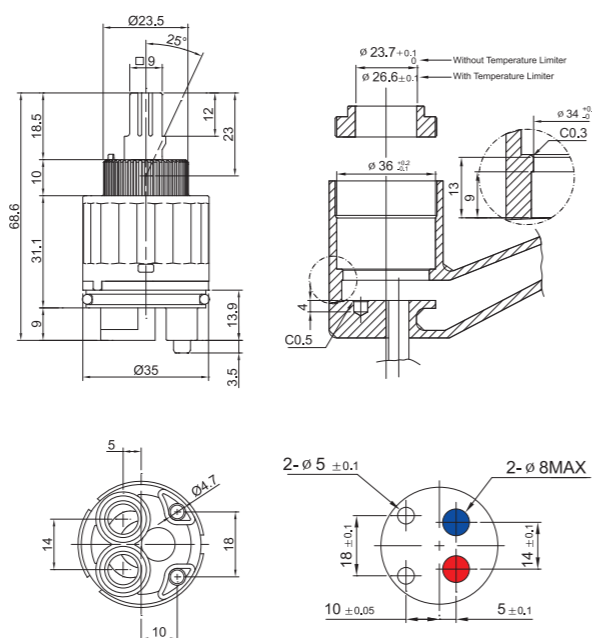
# S.C.C.® CARTRIDGE

## SCC 35BF 35mm Ceramic Cartridge (temperature control)



Max. Opening Angle	25°	
Max. Turning Angle	100°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	12~13 ℓ/min
	(at 2bar)	17~19 ℓ/min
	(at 3bar)	20~28 ℓ/min
Endurance Test	500,000 cycle	

Dimensions (in mm)

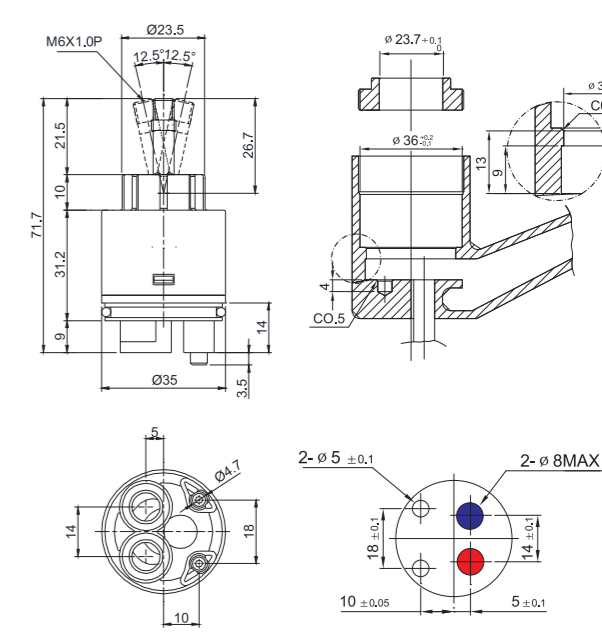


## SCC 35JF 35mm Ceramic Cartridge (joystick)

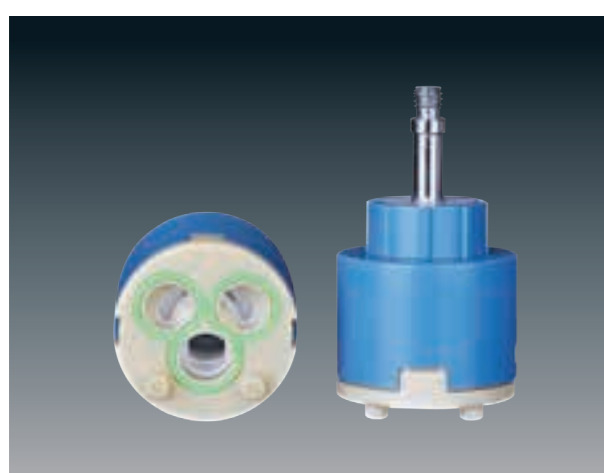


Max. Opening Angle	25°	
Max. Turning Angle	360°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	12~13 ℓ/min
	(at 2bar)	17~19 ℓ/min
	(at 3bar)	20~28 ℓ/min
Endurance Test	500,000 cycle	

Dimensions (in mm)

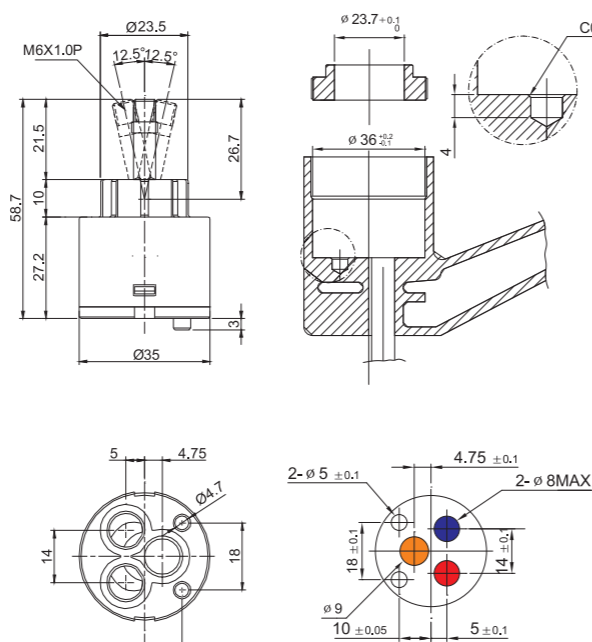


## SCC 35JR 35mm Ceramic Cartridge (joystick)



Max. Opening Angle	25°	
Max. Turning Angle	360°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	12~13 ℓ/min
	(at 2bar)	17~19 ℓ/min
	(at 3bar)	20~28 ℓ/min
Endurance Test	500,000 cycle	

Dimensions (in mm)

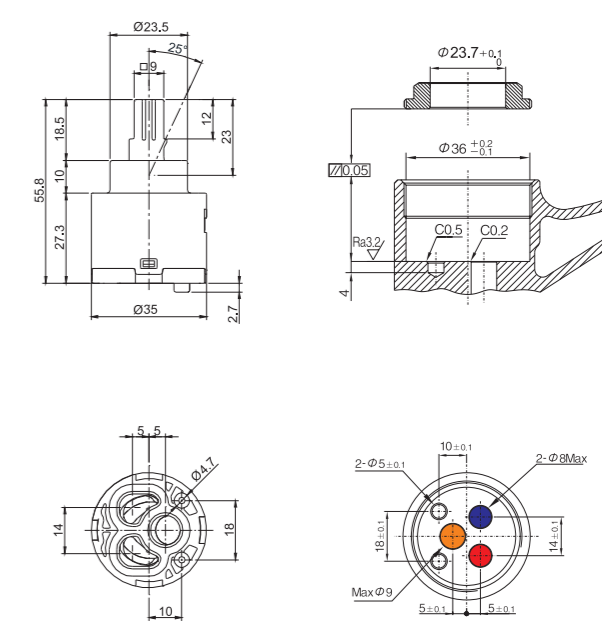


## SCC 35SMR 35mm Ceramic Cartridge (soft move)



Max. Opening Angle	25°	
Max. Turning Angle	100°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	15~19 ℓ/min
	(at 2bar)	20~28 ℓ/min
	(at 3bar)	29~35 ℓ/min
Endurance Test	500,000 cycle	

Dimensions (in mm)





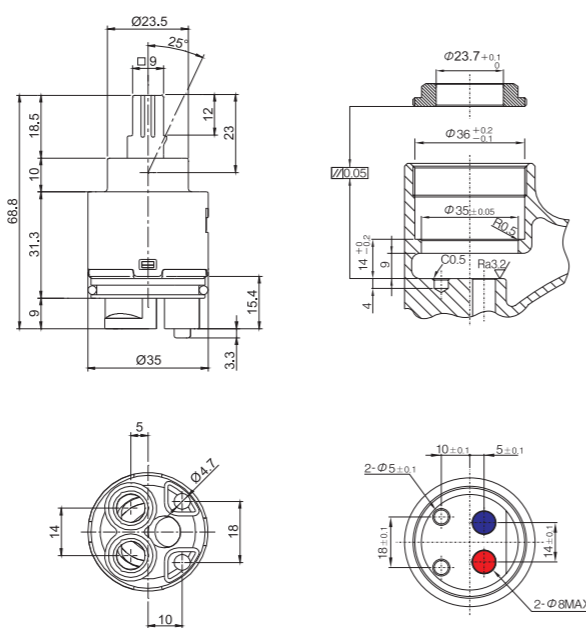
# S.C.C.<sup>®</sup> CARTRIDGE

## SCC 35SMF

## 35mm Ceramic Cartridge (soft move)



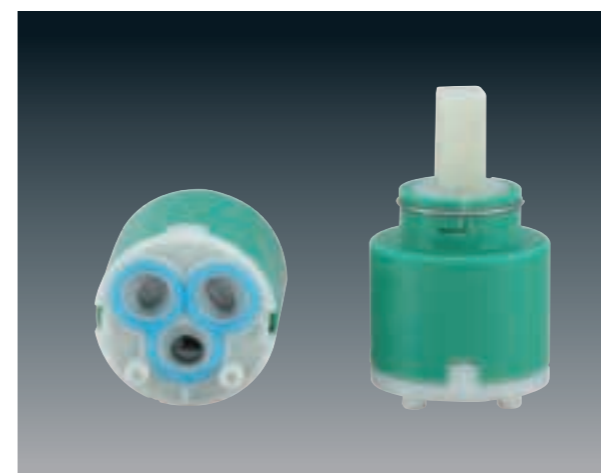
Dimensions (in mm)



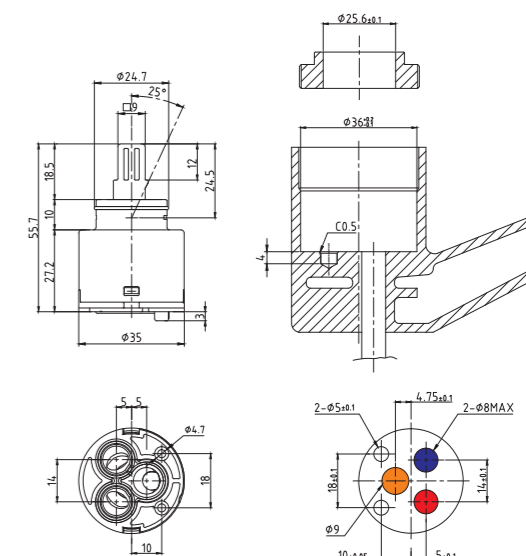
Max. Opening Angle	25°	
Max. Turning Angle	100°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	15~19 l/min
	(at 2bar)	20~28 l/min
	(at 3bar)	29~35 l/min
Endurance Test	500,000 cycle	

## NEW SCC 35ER

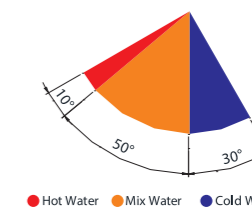
## 35mm Eco Ceramic Cartridge



Dimensions (in mm)

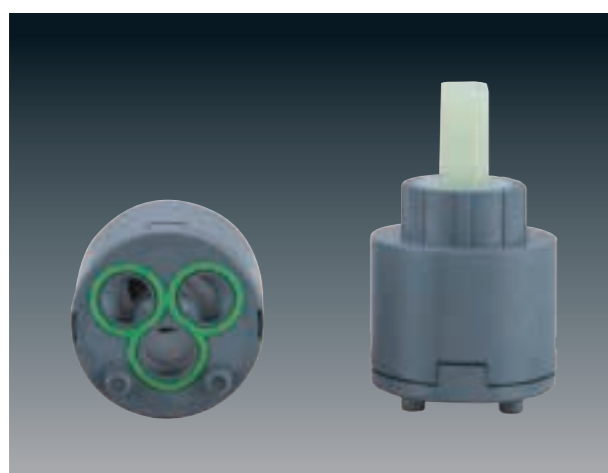


Max. Opening Angle	25°	
Max. Turning Angle	60°/30°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	7.5~8.5 l/min
	(at 2bar)	10.5~12 l/min
	(at 3bar)	13.5~15 l/min
Endurance Test	500,000 cycle	

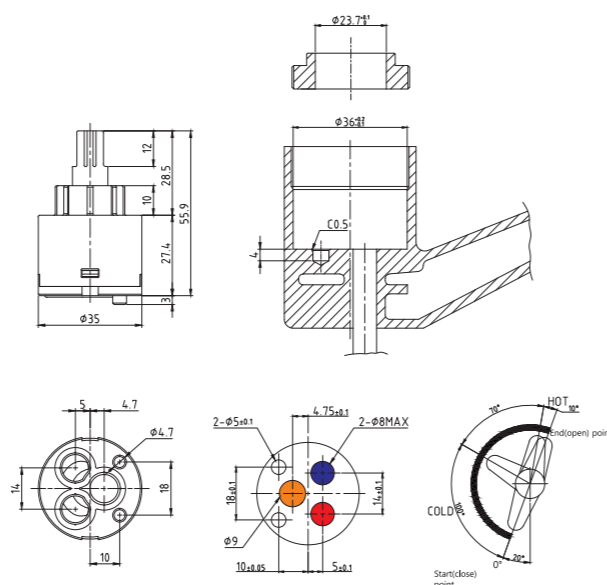


## SCC 35VR

## 35mm Ceramic Volume Cartridge



Dimensions (in mm)



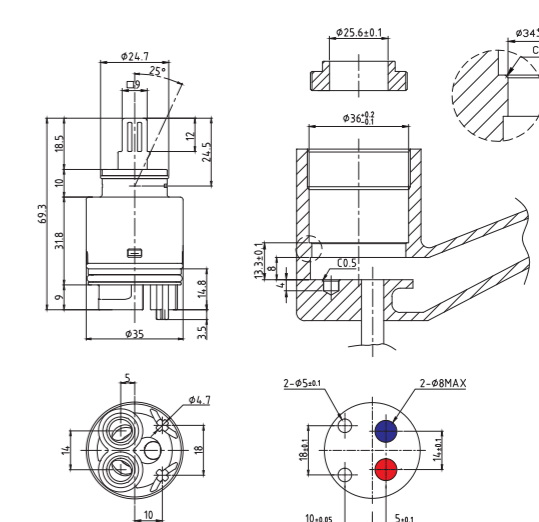
Max. Opening Angle	180°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	12~13 l/min
	(at 2bar)	17~19 l/min
	(at 3bar)	20~28 l/min
Endurance Test	500,000 cycle	

## NEW SCC 35EF

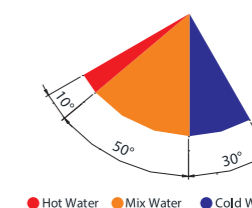
## 35mm Eco Ceramic Cartridge



Dimensions (in mm)



Max. Opening Angle	25°	
Max. Turning Angle	60°/30°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	7.5~8.5 l/min
	(at 2bar)	10.5~12 l/min
	(at 3bar)	13.5~15 l/min
Endurance Test	500,000 cycle	



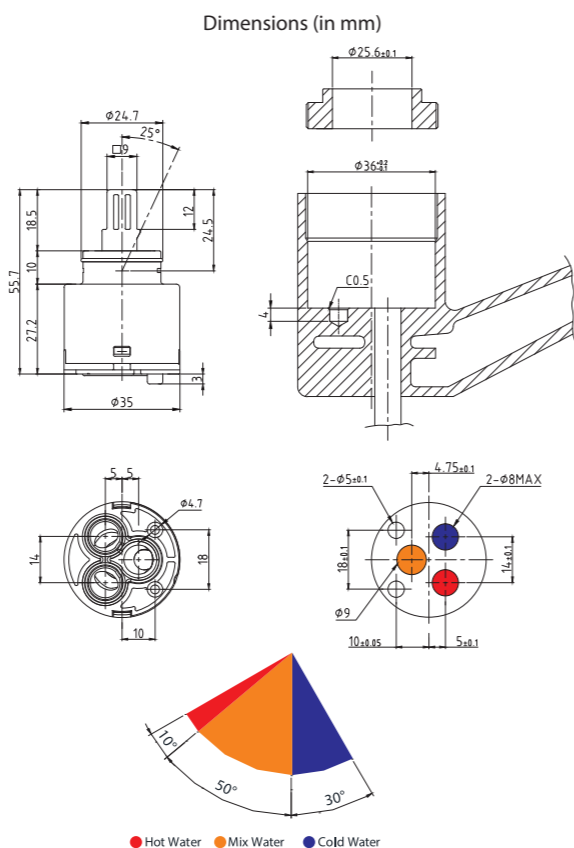
# S.C.C® CARTRIDGE

**NEW** SCC 35ER,A

35mm Eco Ceramic Cartridge



Max. Opening Angle	25°	
Max. Turning Angle	60°/30°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	7.5~8.5 ℓ/min
	(at 2bar)	10.5~12 ℓ/min
	(at 3bar)	13.5~15 ℓ/min
Endurance Test	500,000 cycle	

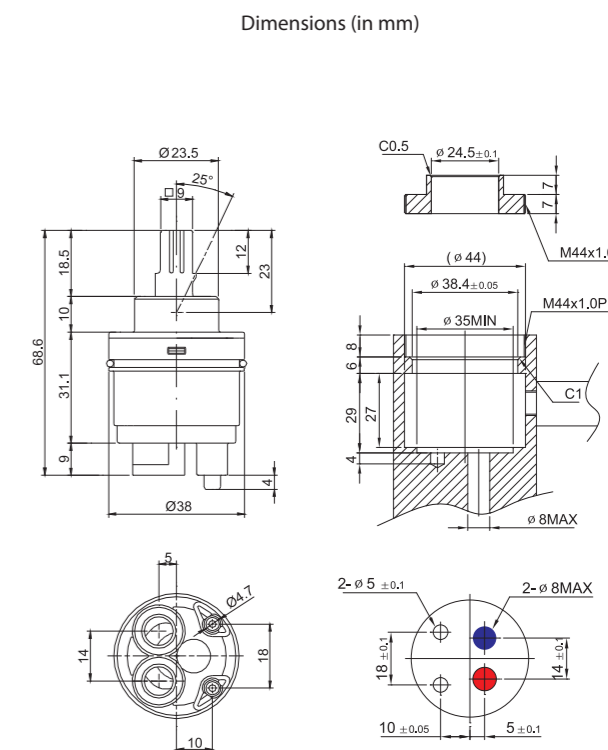


SCC 38AF

38mm Ceramic Cartridge



Max. Opening Angle	25°	
Max. Turning Angle	100°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	12~13 ℓ/min
	(at 2bar)	17~19 ℓ/min
	(at 3bar)	20~28 ℓ/min
Endurance Test	500,000 cycle	

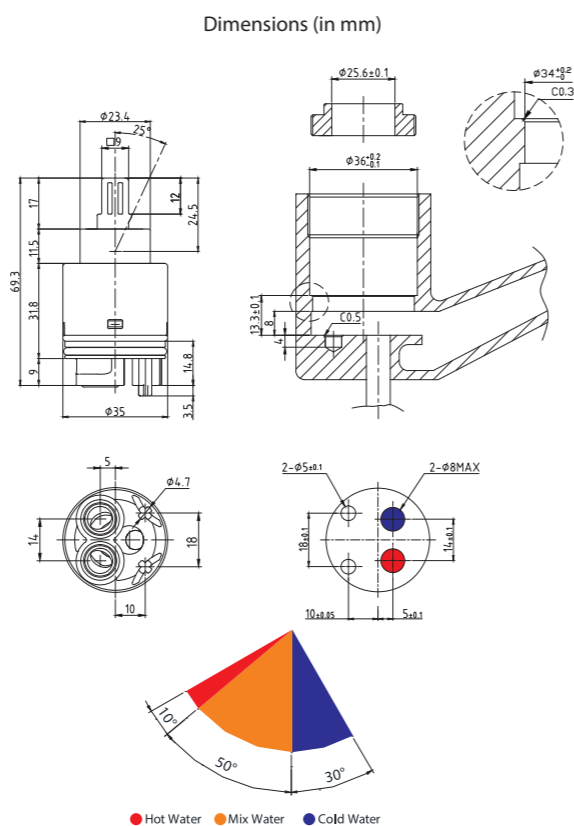


**NEW** SCC 35EF,A

35mm Eco Ceramic Cartridge



Max. Opening Angle	25°	
Max. Turning Angle	60°/30°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	7.5~8.5 ℓ/min
	(at 2bar)	10.5~12 ℓ/min
	(at 3bar)	13.5~15 ℓ/min
Endurance Test	500,000 cycle	

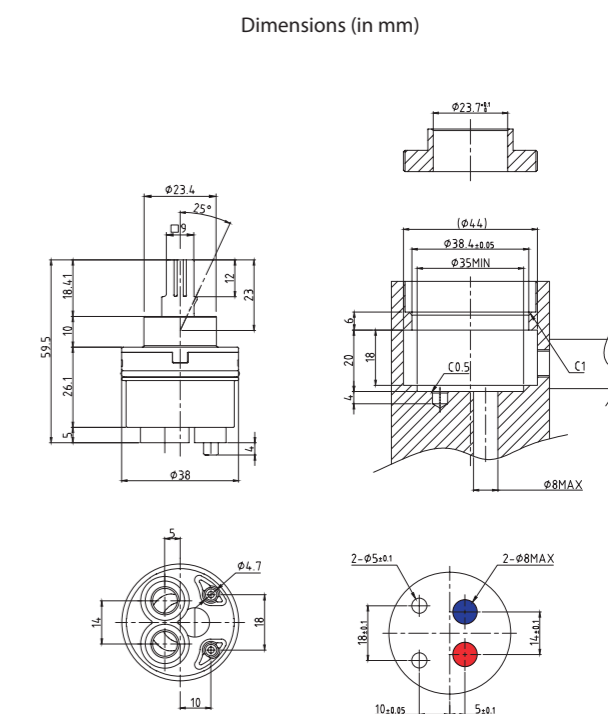


SCC 38AF-CO

38mm Ceramic Cartridge



Max. Opening Angle	25°	
Max. Turning Angle	100°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	12~13 ℓ/min
	(at 2bar)	17~19 ℓ/min
	(at 3bar)	20~28 ℓ/min
Endurance Test	500,000 cycle	





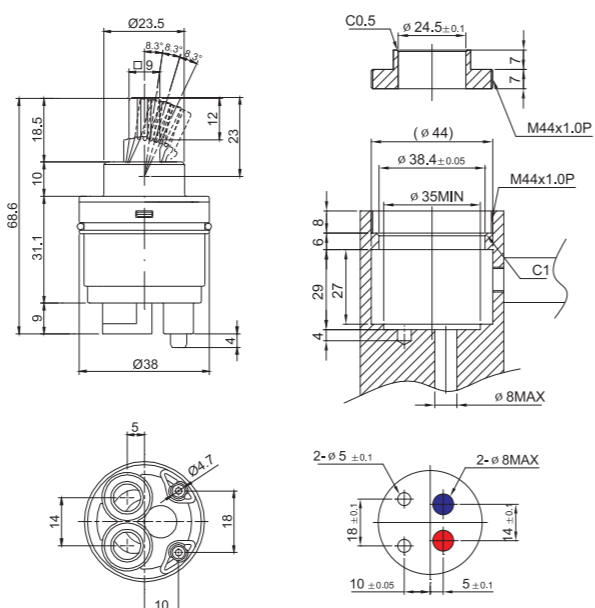
# S.C.C.<sup>®</sup> CARTRIDGE

## SCC 38AF-3S

## 38mm Ceramic Cartridge (3step)



Dimensions (in mm)



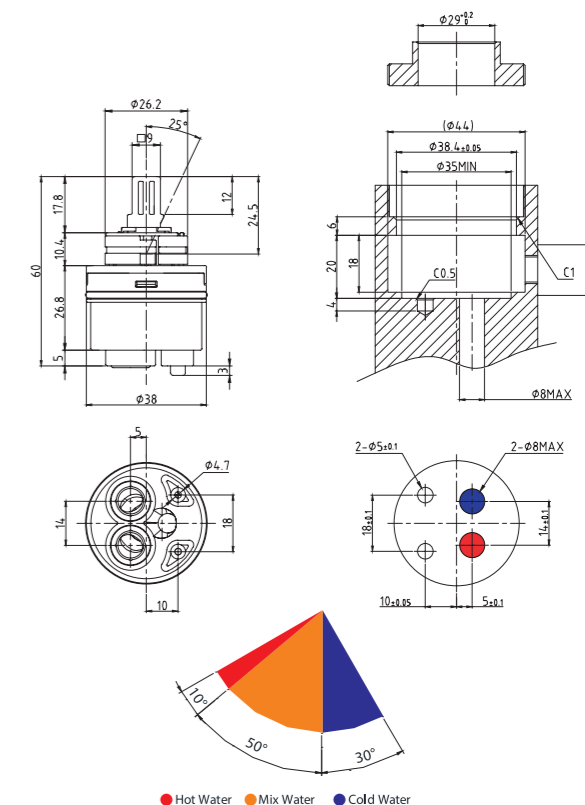
Max. Opening Angle	25°	
Max. Turning Angle	100°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	12~13 l/min
	(at 2bar)	17~19 l/min
	(at 3bar)	20~28 l/min
Endurance Test	500,000 cycle	

## NEW SCC 38EF-CO

## 38mm Ceramic Cartridge (3step)



Dimensions (in mm)



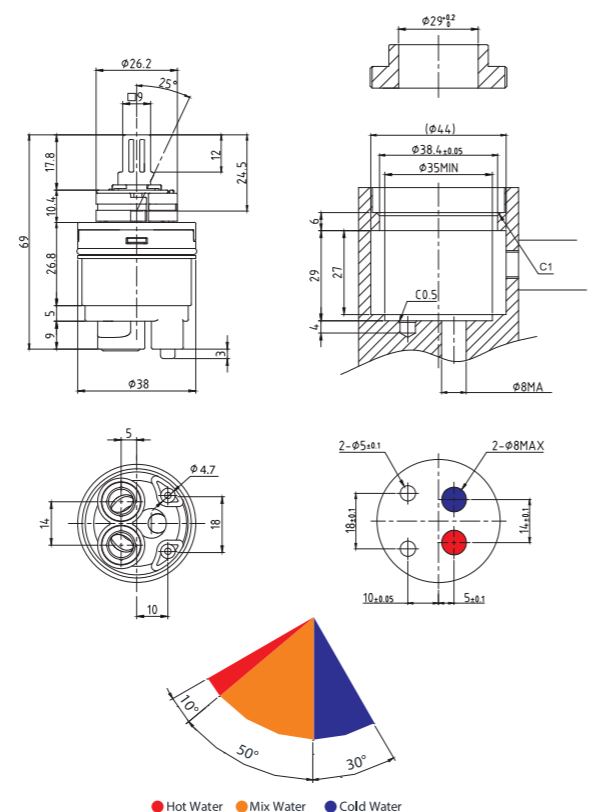
Max. Opening Angle	25°	
Max. Turning Angle	60°/30°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	7.5~8.5 l/min
	(at 2bar)	10.5~12 l/min
	(at 3bar)	13.5~15 l/min
Endurance Test	500,000 cycle	

## NEW SCC 38EF

## 38mm Eco Ceramic Cartridge



Dimensions (in mm)



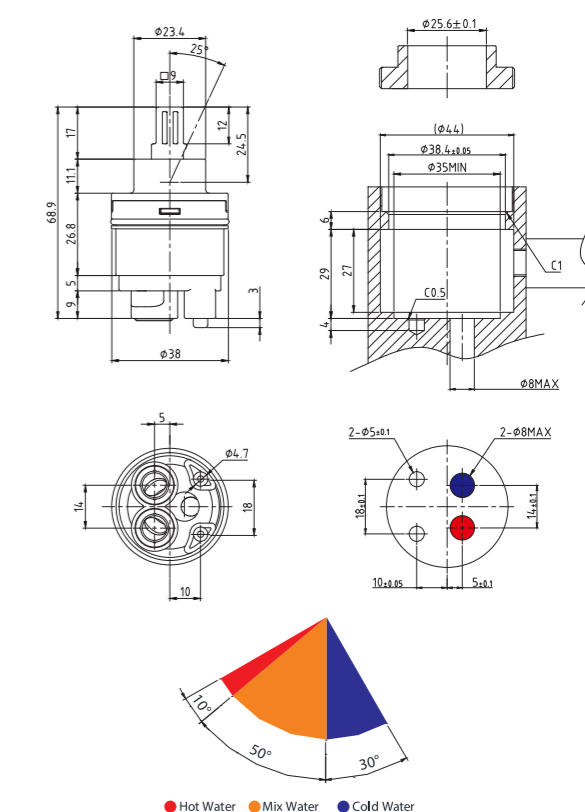
Max. Opening Angle	25°	
Max. Turning Angle	60°/30°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	7.5~8.5 l/min
	(at 2bar)	10.5~12 l/min
	(at 3bar)	13.5~15 l/min
Endurance Test	500,000 cycle	

## NEW SCC 38EF,A

## 38mm Eco Ceramic Cartridge



Dimensions (in mm)

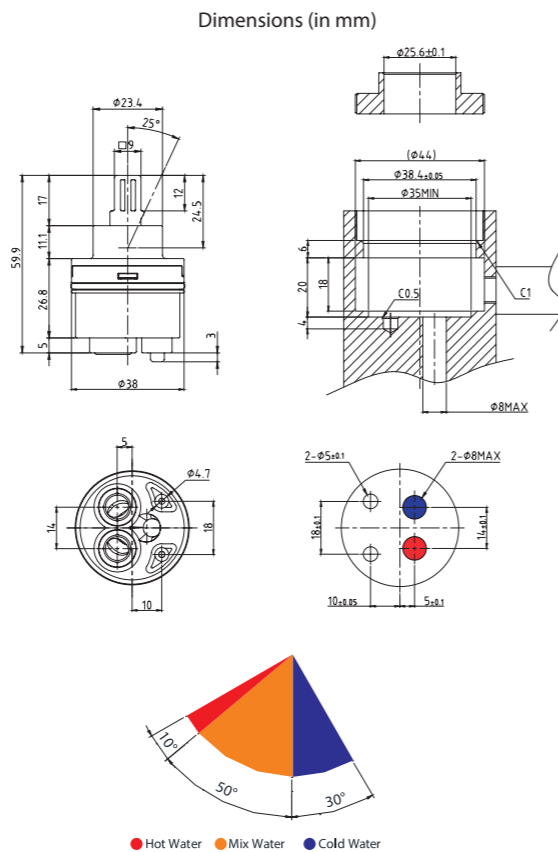


Max. Opening Angle	25°	
Max. Turning Angle	60°/30°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	7.5~8.5 l/min
	(at 2bar)	10.5~12 l/min
	(at 3bar)	13.5~15 l/min
Endurance Test	500,000 cycle	

# S.C.C® CARTRIDGE

**NEW** SCC 38EF,A-CO

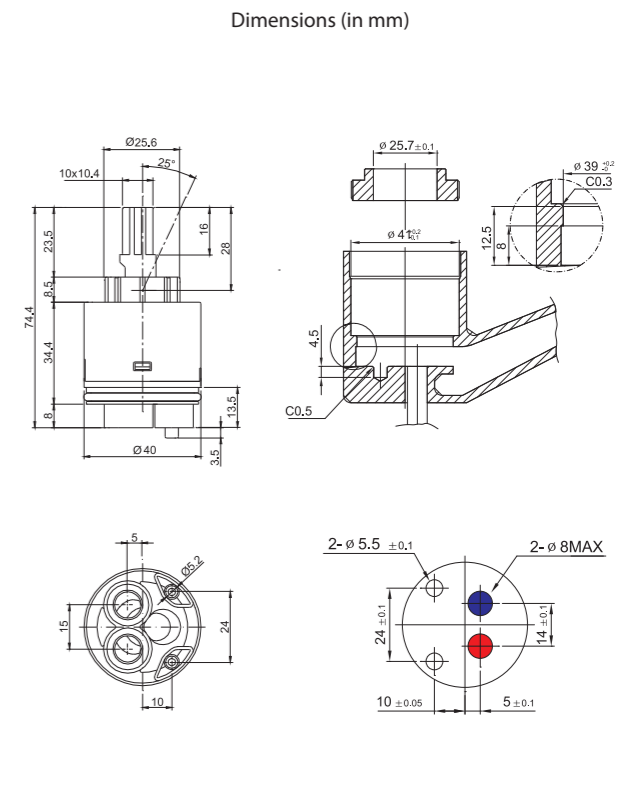
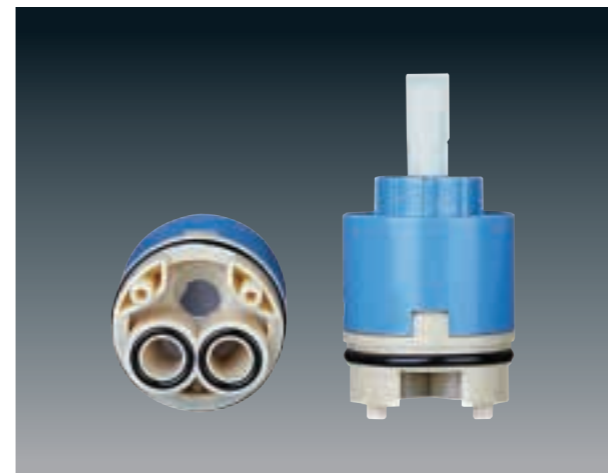
38mm Eco Ceramic Cartridge



Max. Opening Angle	25°	
Max. Turning Angle	60°/30°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	7.5~8.5 ℓ/min
	(at 2bar)	10.5~12 ℓ/min
	(at 3bar)	13.5~15 ℓ/min
Endurance Test	500,000 cycle	

SCC 40SF

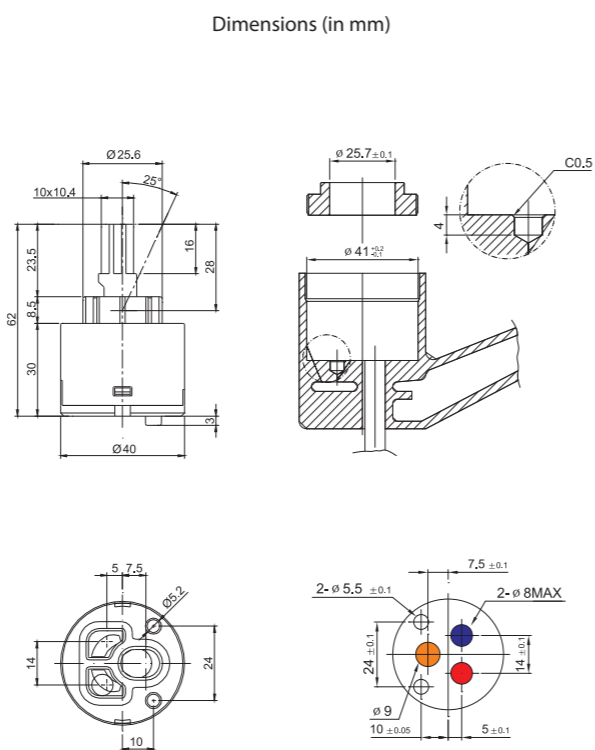
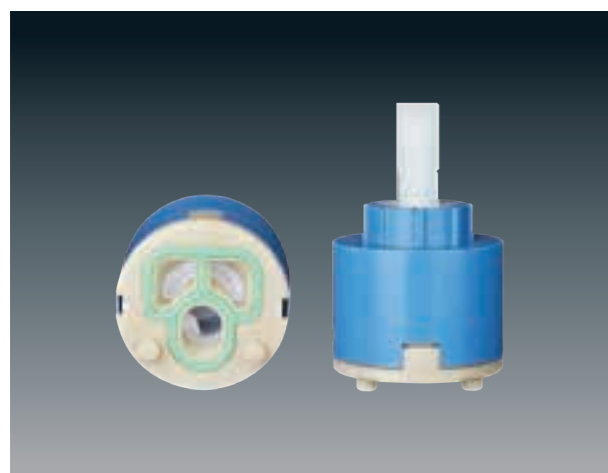
40mm Ceramic Cartridge



Max. Opening Angle	25°	
Max. Turning Angle	100°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	12~13 ℓ/min
	(at 2bar)	17~19 ℓ/min
	(at 3bar)	20~28 ℓ/min
Endurance Test	500,000 cycle	

SCC 40SR

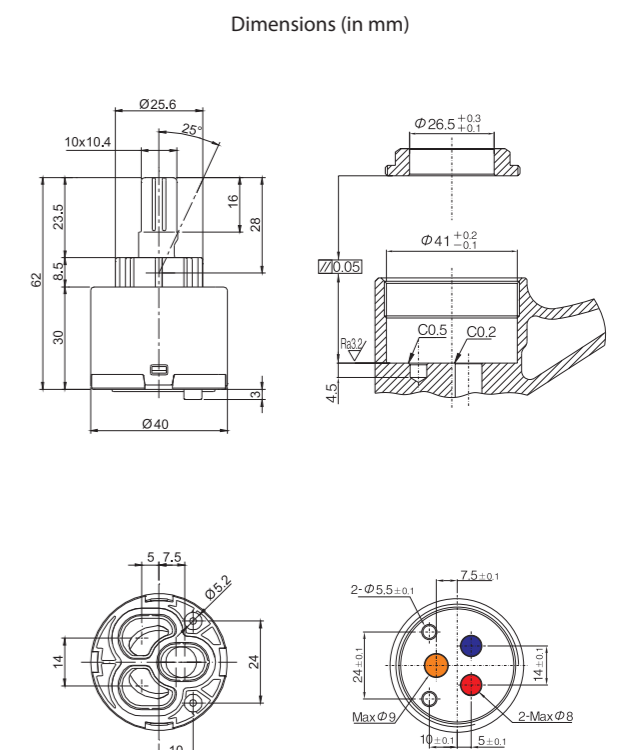
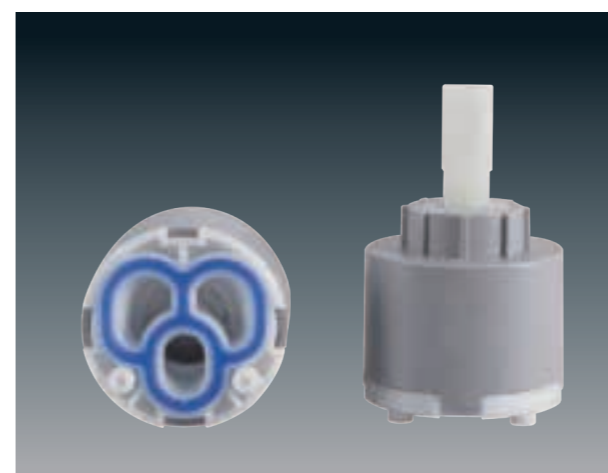
40mm Ceramic Cartridge



Max. Opening Angle	25°	
Max. Turning Angle	100°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	12~13 ℓ/min
	(at 2bar)	17~19 ℓ/min
	(at 3bar)	20~28 ℓ/min
Endurance Test	500,000 cycle	

SCC 40SMR

40mm Ceramic Cartridge (soft move)

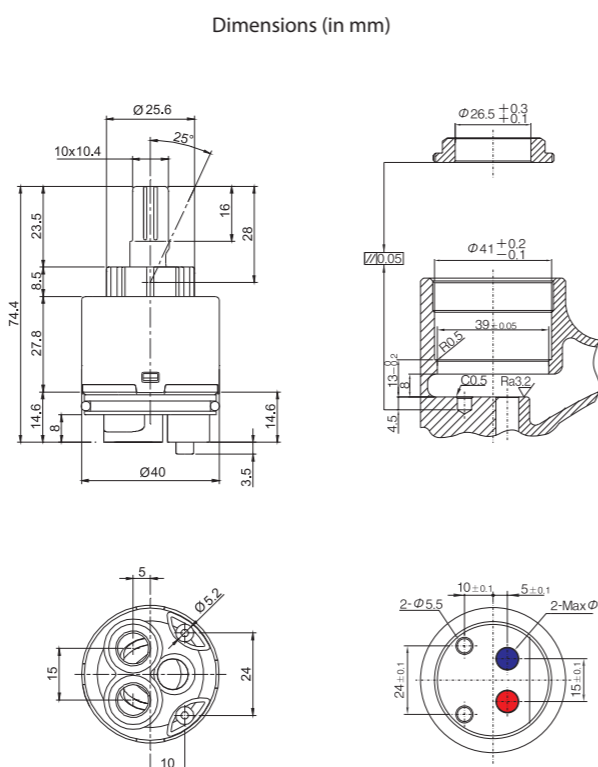


Max. Opening Angle	25°	
Max. Turning Angle	100°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	16~20 ℓ/min
	(at 2bar)	23~31 ℓ/min
	(at 3bar)	31~37 ℓ/min
Endurance Test	500,000 cycle	



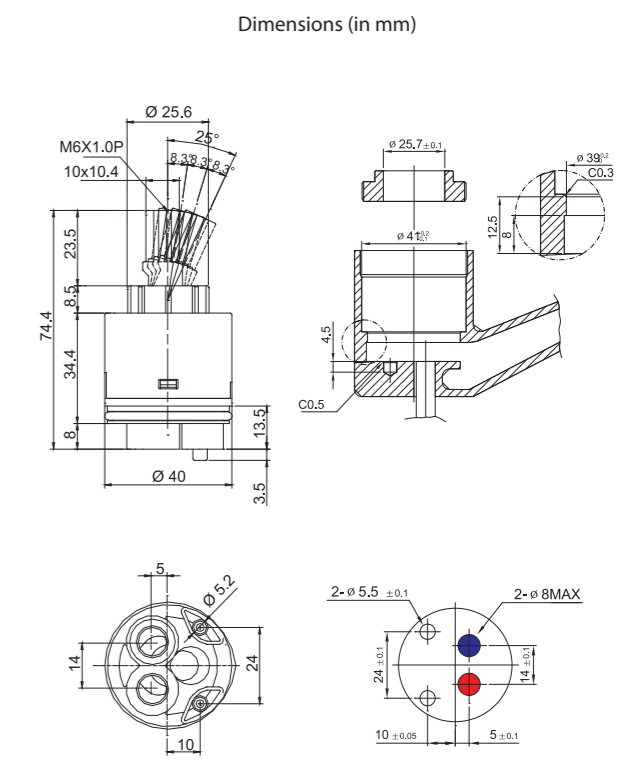
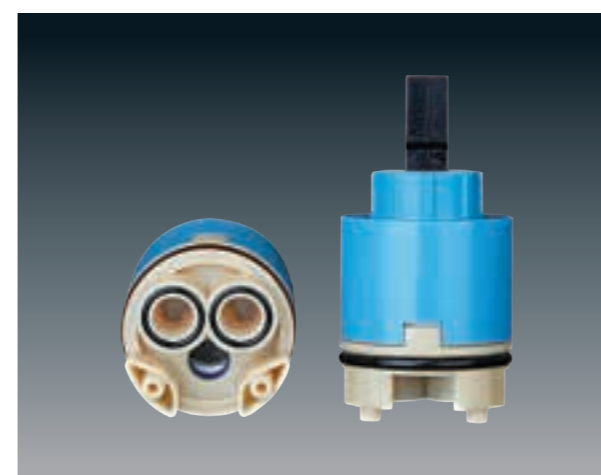
# S.C.C® CARTRIDGE

## SCC 40SMF 40mm Ceramic Cartridge (soft move)



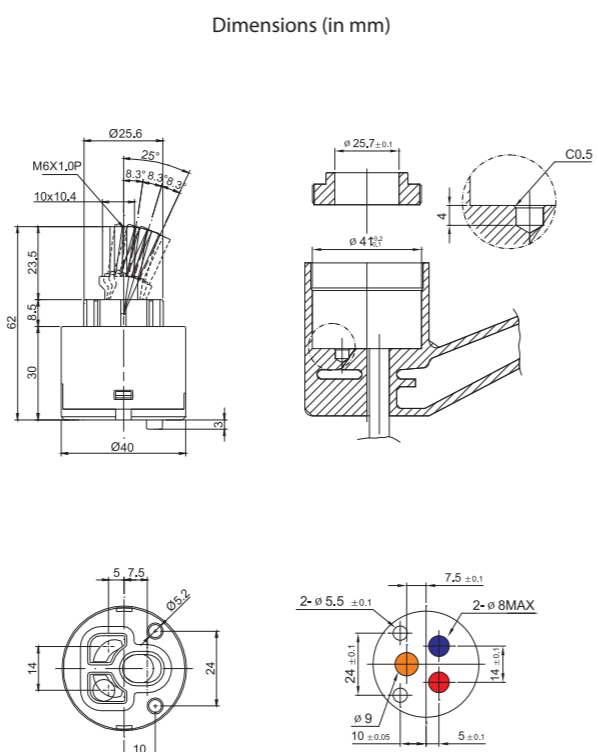
Max. Opening Angle	25°	
Max. Turning Angle	100°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	16~20 l/min
	(at 2bar)	23~31 l/min
	(at 3bar)	31~37 l/min
Endurance Test	500,000 cycle	

## SCC 40SF-3 40mm Ceramic Cartridge (3step)



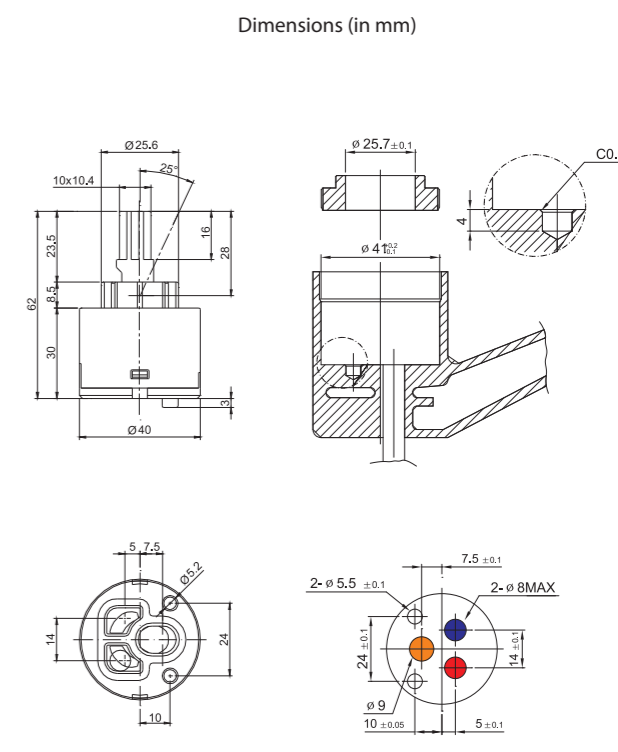
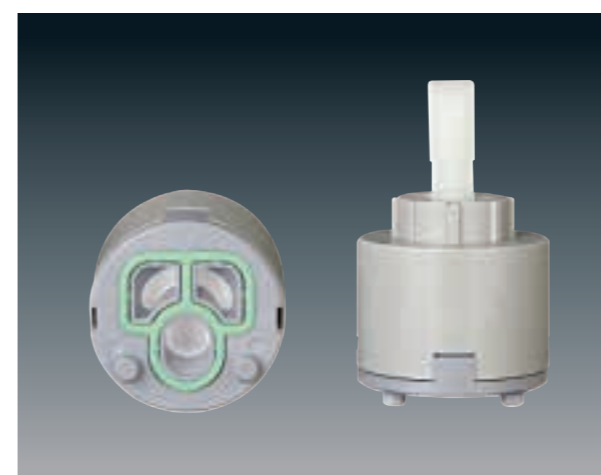
Max. Opening Angle	25°	
Max. Turning Angle	100°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	12~13 l/min
	(at 2bar)	17~19 l/min
	(at 3bar)	20~28 l/min
Endurance Test	500,000 cycle	

## SCC 40SR-3 40mm Ceramic Cartridge (3step)



Max. Opening Angle	25°	
Max. Turning Angle	100°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	12~13 l/min
	(at 2bar)	17~19 l/min
	(at 3bar)	20~28 l/min
Endurance Test	500,000 cycle	

## SCC 40LR 40mm Ceramic Cartridge



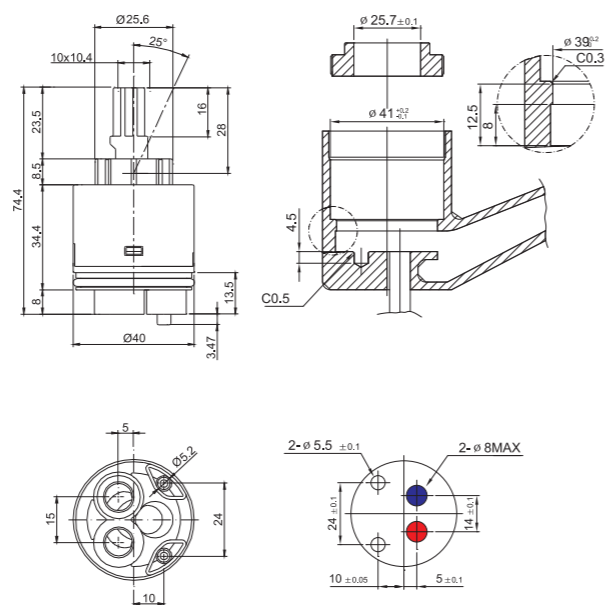
Max. Opening Angle	25°	
Max. Turning Angle	100°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	12~13 l/min
	(at 2bar)	17~19 l/min
	(at 3bar)	20~28 l/min
Endurance Test	500,000 cycle	

# S.C.C.<sup>®</sup> CARTRIDGE

## SCC 40LF 40mm Ceramic Cartridge



Dimensions (in mm)

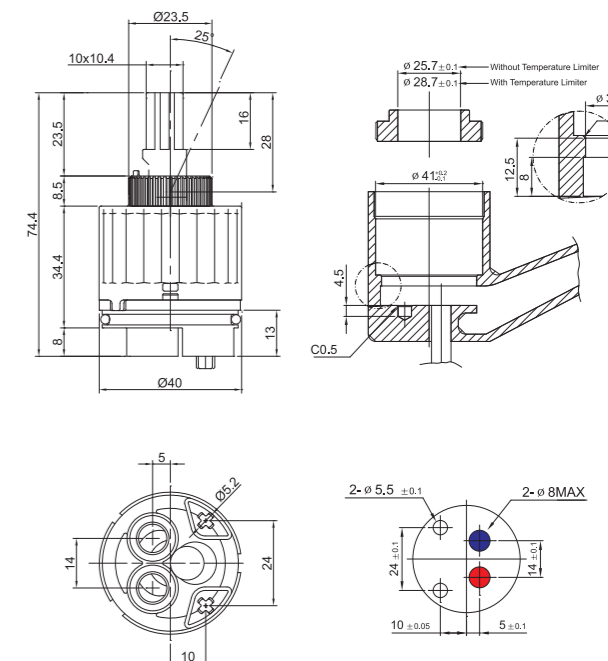


Max. Opening Angle	25°	
Max. Turning Angle	100°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	12~13 ℓ/min
	(at 2bar)	17~19 ℓ/min
	(at 3bar)	20~28 ℓ/min
Endurance Test	500,000 cycle	

## SCC 40BF 40mm Ceramic Cartridge (temperature control)



Dimensions (in mm)

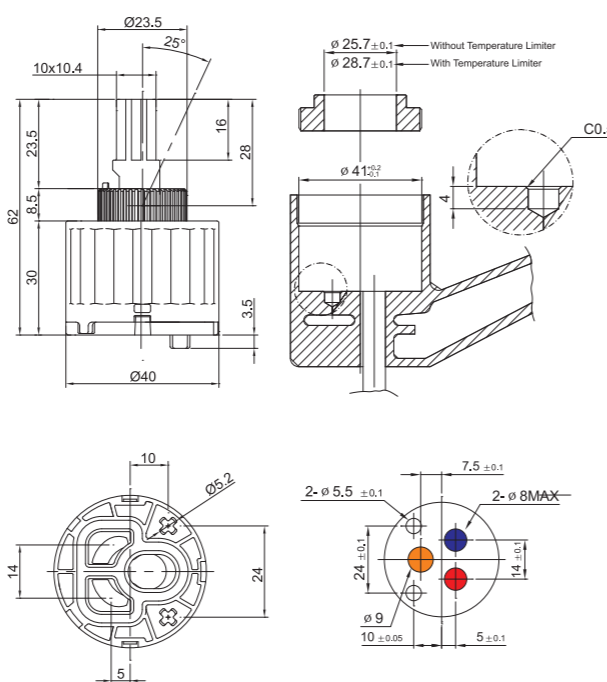


Max. Opening Angle	25°	
Max. Turning Angle	100°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	12~13 ℓ/min
	(at 2bar)	17~19 ℓ/min
	(at 3bar)	20~28 ℓ/min
Endurance Test	500,000 cycle	

## SCC 40BR 40mm Ceramic Cartridge (temperature control)

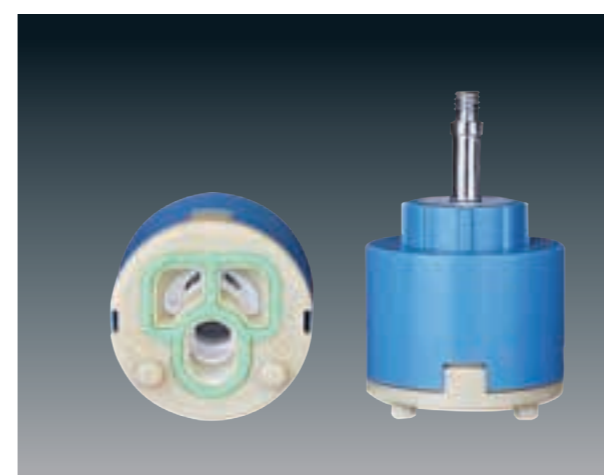


Dimensions (in mm)

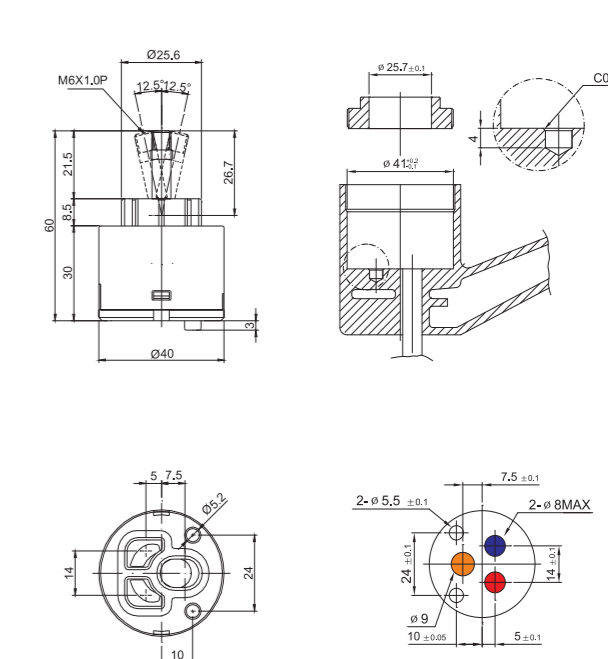


Max. Opening Angle	25°	
Max. Turning Angle	100°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	12~13 ℓ/min
	(at 2bar)	17~19 ℓ/min
	(at 3bar)	20~28 ℓ/min
Endurance Test	500,000 cycle	

## SCC 40JR 40mm Ceramic Cartridge (joystick)



Dimensions (in mm)



Max. Opening Angle	25°	
Max. Turning Angle	100°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	12~13 ℓ/min
	(at 2bar)	17~19 ℓ/min
	(at 3bar)	20~28 ℓ/min
Endurance Test	500,000 cycle	



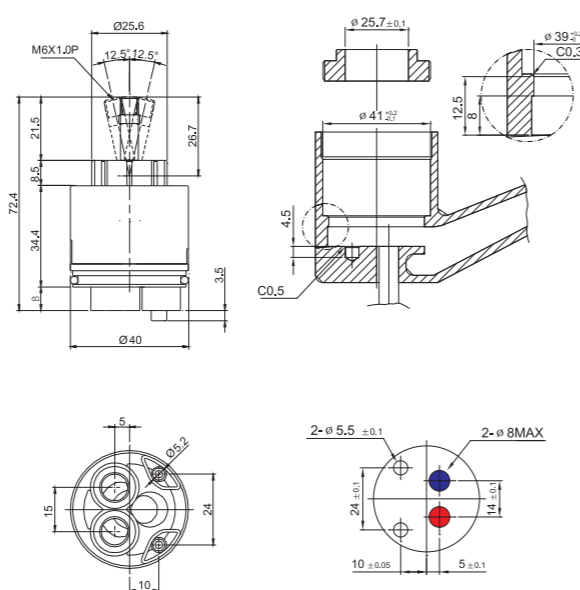
# S.C.C.® CARTRIDGE

## SCC 40JF

## 40mm Ceramic Cartridge (joystick)



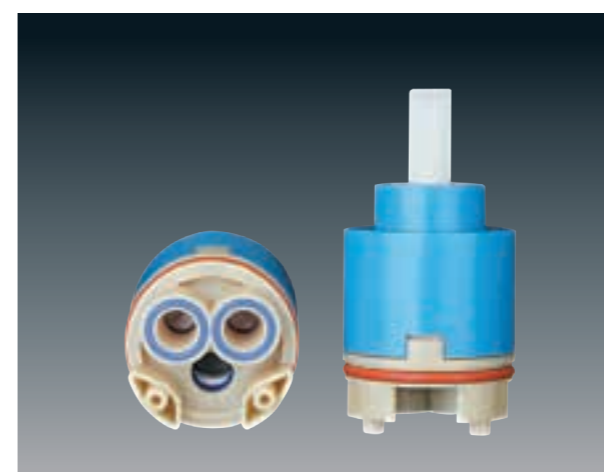
Dimensions (in mm)



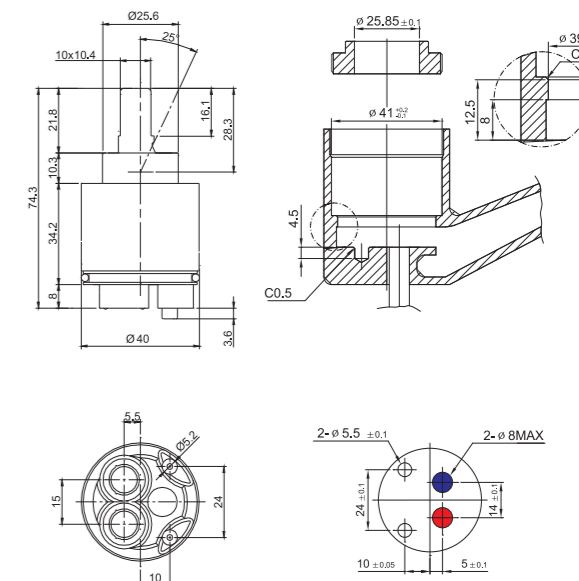
Max. Opening Angle	25°	
Max. Turning Angle	100°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	12~13 ℓ/min
	(at 2bar)	17~19 ℓ/min
	(at 3bar)	20~28 ℓ/min
Endurance Test	500,000 cycle	

## SCC 40AF

## 40mm Ceramic Cartridge



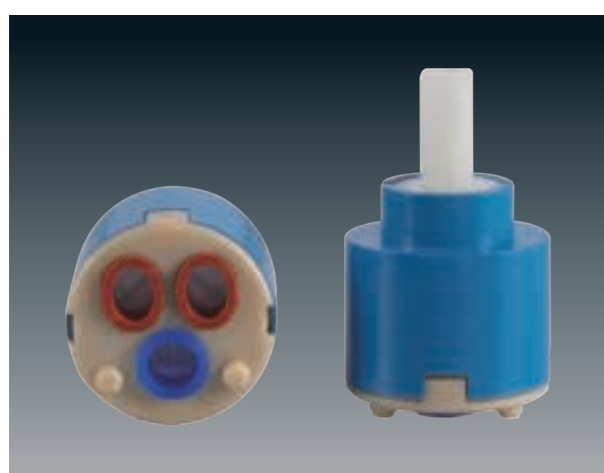
Dimensions (in mm)



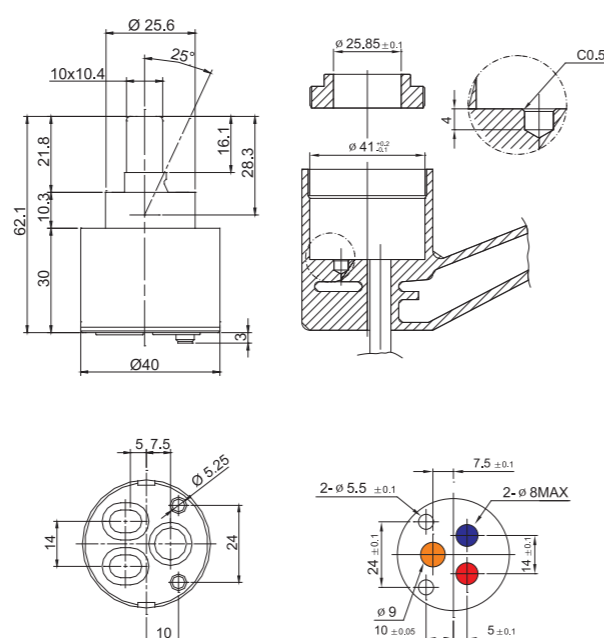
Max. Opening Angle	25°	
Max. Turning Angle	110°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	12~13 ℓ/min
	(at 2bar)	17~19 ℓ/min
	(at 3bar)	20~28 ℓ/min
Endurance Test	500,000 cycle	

## SCC 40AR

## 40mm Ceramic Cartridge



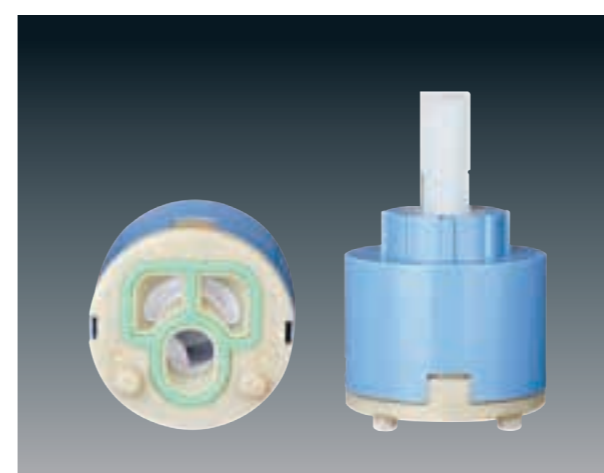
Dimensions (in mm)



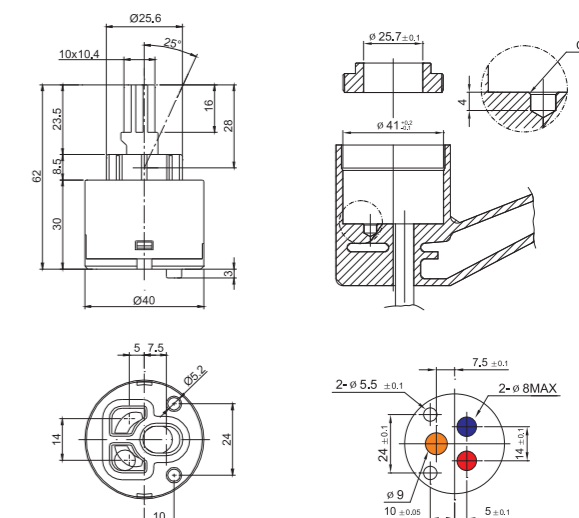
Max. Opening Angle	25°	
Max. Turning Angle	110°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	12~13 ℓ/min
	(at 2bar)	17~19 ℓ/min
	(at 3bar)	20~28 ℓ/min
Endurance Test	500,000 cycle	

## NEW SCC 40ER

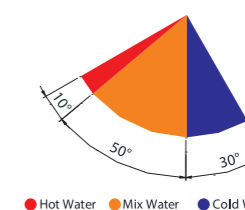
## 40mm Eco Ceramic Cartridge



Dimensions (in mm)



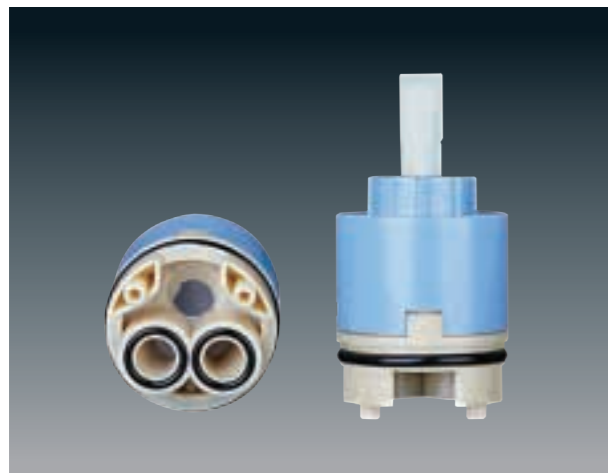
Max. Opening Angle	25°	
Max. Turning Angle	60°/30°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	9~10 ℓ/min
	(at 2bar)	11~13 ℓ/min
	(at 3bar)	14~16 ℓ/min
Endurance Test	500,000 cycle	



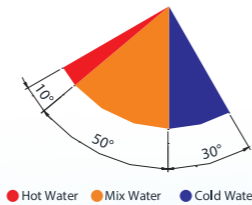
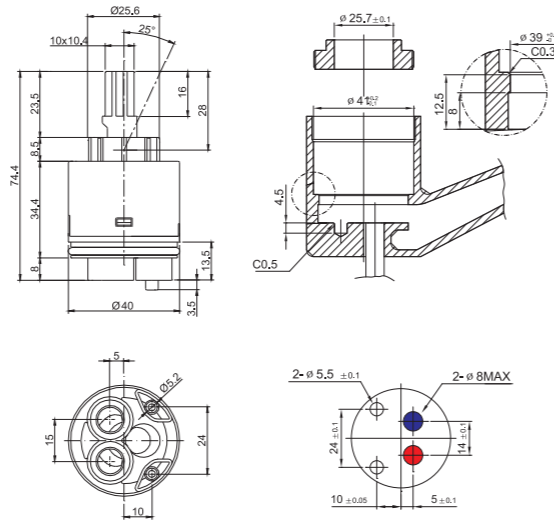
# S.C.C® CARTRIDGE

**NEW** SCC 40EF

40mm Eco Ceramic Cartridge



Dimensions (in mm)



● Hot Water ● Mix Water ● Cold Water

Max. Opening Angle	25°	
Max. Turning Angle	60°/30°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	9~10 ℓ/min
	(at 2bar)	11~13 ℓ/min
	(at 3bar)	14~16 ℓ/min
Endurance Test	500,000 cycle	



**DIVERTER CATRIDGE**



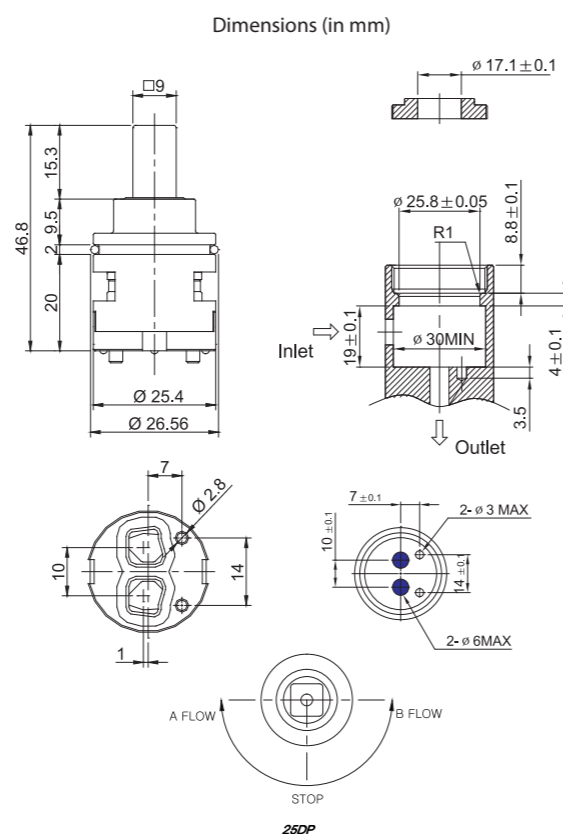
# S.C.C.<sup>®</sup> DIVERTER CATRIDGE

## SCC 25DP

## 25mm Diverter



Max. Turning Angle	180°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	12~14 l/min
	(at 2bar)	18~21 l/min
	(at 3bar)	23~25 l/min
Endurance Test	500,000 cycle	

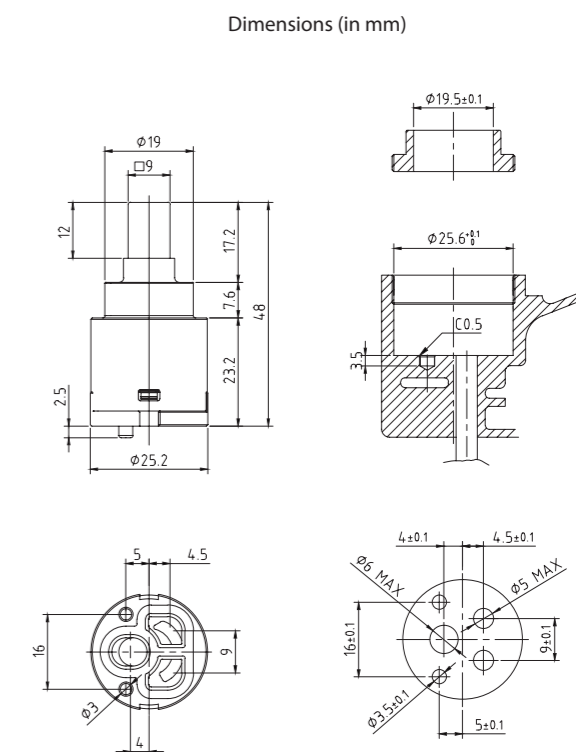


## SCC 25D-2W

## 25mm Diverter



Max. Turning Angle	100°	
Nut Torque	8 ~ 9 Nm	
Water Resistance Pressure	Max. 25bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	6.8~7.5 l/min
	(at 2bar)	8.8~9.4 l/min
	(at 3bar)	10.5~11.0 l/min
Endurance Test	500,000 cycle	

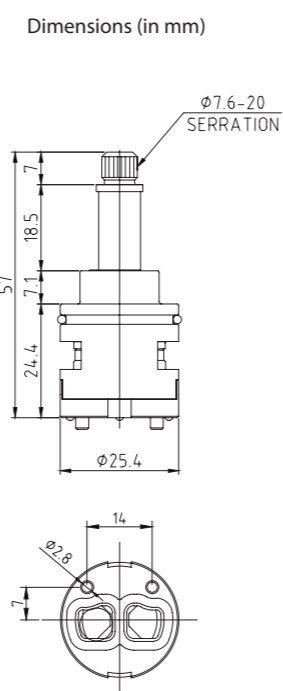


## SCC 25DD-1

## 25mm Diverter



Max. Turning Angle	180°	
Nut Torque	8 ~ 9 Nm	
Water Resistance Pressure	Max. 25bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	12~14 l/min
	(at 2bar)	18~21 l/min
	(at 3bar)	23~25 l/min
Endurance Test	500,000 cycle	

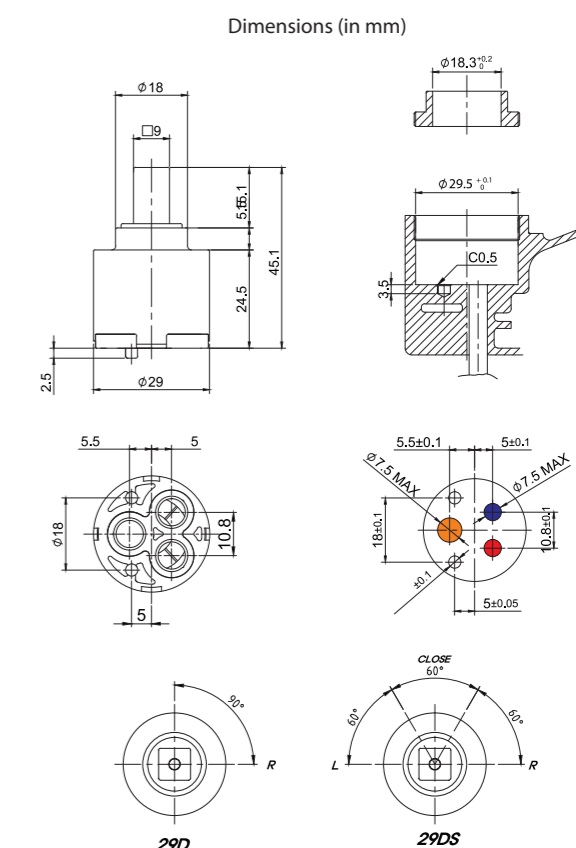


## SCC 29D/DS

## 29mm Diverter



Max. Turning Angle	29D 90° / 29DS 180°	
Nut Torque	9 ~ 10 Nm	
Water Resistance Pressure	Max. 25bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	13.0~14.0 l/min
	(at 2bar)	21.0~22.0 l/min
	(at 3bar)	26.0~27.0 l/min
Endurance Test	500,000 cycle	



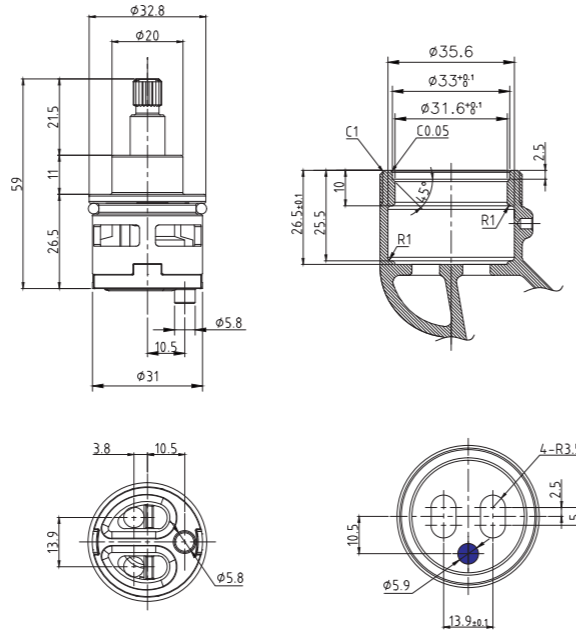
# S.C.C.® DIVERTER CARTRIDGE

## SCC 31D-2W

## 31mm Diverter



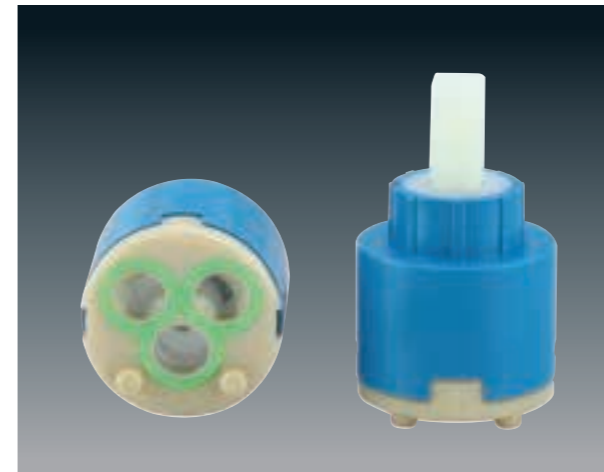
Dimensions (in mm)



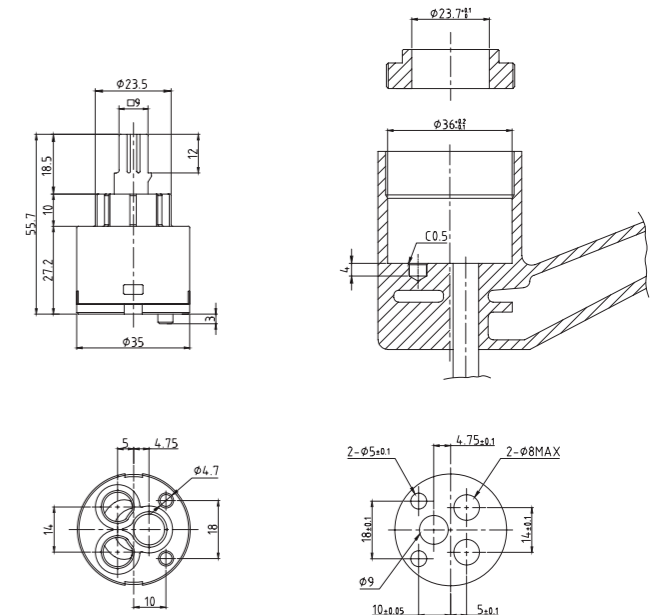
Max. Turning Angle	360°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	80°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	19~21 l/min
	(at 2bar)	24~26 l/min
	(at 3bar)	30~32 l/min
Endurance Test	500,000 cycle	

## SCC 35D-2W

## 35mm Diverter



Dimensions (in mm)



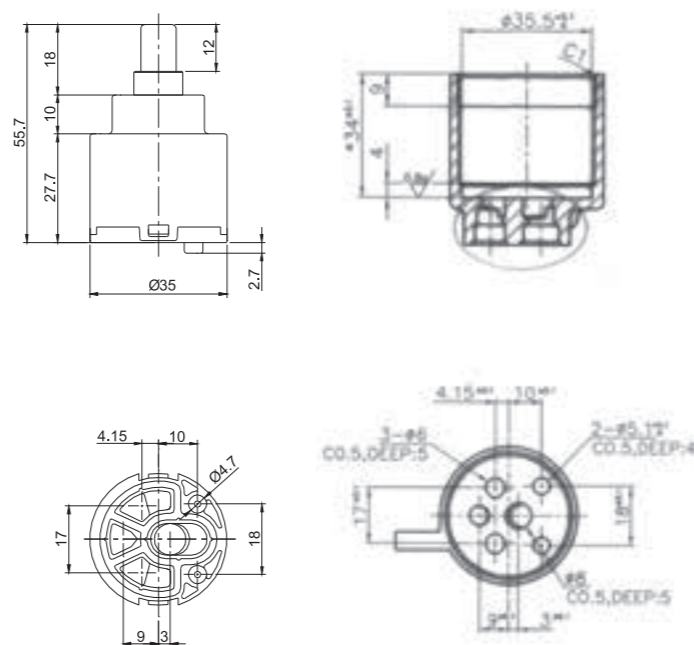
Max. Turning Angle	100°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	12~13 l/min
	(at 2bar)	17~19 l/min
	(at 3bar)	20~28 l/min
Endurance Test	500,000 cycle	

## SCC 35D-3W

## 35mm Diverter



Dimensions (in mm)



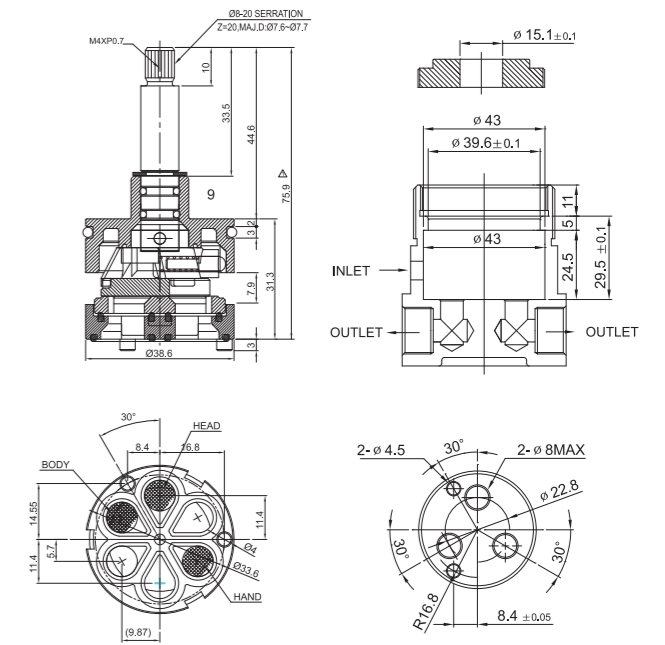
Max. Turning Angle	100°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	10~11 l/min
	(at 2bar)	18~19 l/min
	(at 3bar)	20~21 l/min
Endurance Test	500,000 cycle	

## SCC 40D-4W (3W, 5W)

## 40mm Diverter



Dimensions (in mm)



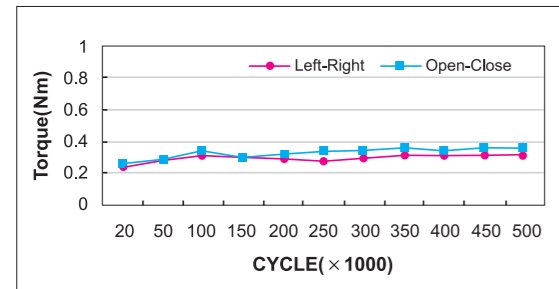
Max. Turning Angle	360°	
Nut Torque	8 ~ 10 Nm	
Water Resistance Pressure	Max. 35bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	10~11 l/min
	(at 2bar)	15~17 l/min
	(at 3bar)	18~20 l/min
Endurance Test	500,000 cycle	



# S.C.C® DIVERTER CARTRIDGE

## Endurance Test

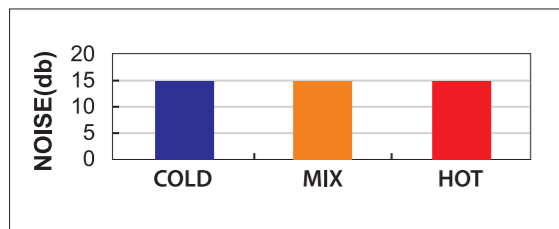
- Nut Tightening Torque : 11Nm
- Water Pressure : 1.5Mpa
- Water Temperature : 30 ~ 50°C
- Cycle : 500,000
- Operating : Open ▶ Right ▶ Close ▶ Left



## Noise Level

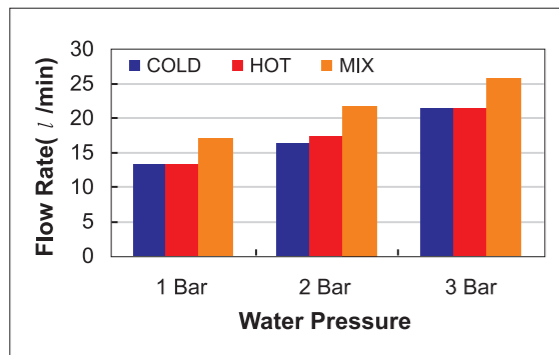
- Condition : With noise reducer, Aerator
- Hot/Cold Water Pressure : 3Bar

	COLD	MIX	HOT
NOISE	15	14.5	14.7



## Flow Rate

	COLD	HOT	MIX
1 Bar	13	13	17
2 Bar	16	17	22
3 Bar	12	21	26



## Materials

### SCC S

NO	Cartridge Component	Material
1	Housing	Noryl(PPO)
2	Lever	Nylon(PA6+GF)
3	Pin	SUS
4	Slider	Acetal(POM)
5	Ceramic Disc	Al <sub>2</sub> O <sub>3</sub> 96%
6	Seat	Noryl(PPO+GF)
7	inner Packing	Silicone
8	Out Packing	Silicone
9	O-Ring on the seat	Silicone or NBR

### SCC L

NO	Cartridge Component	Material
1	Housing	Noryl(PPO)
2	Lever	Nylon(PA6+GF)
3	Pin	SUS
4	Slider	Acetal(POM)
5	Ceramic Disc	Al <sub>2</sub> O <sub>3</sub> 96%
6	Seat	Noryl(PPO+GF)
7	inner Packing	Silicone
8	Out Packing	Silicone or NBR
9	O-Ring on the seat	Silicone or NBR

### SCC B

NO	Cartridge Component	Material
1	Housing	Noryl(PPO+GF)
2	Lever	Nylon(PA6+GF)
3	Pin	SUS
4	Slider	Acetal(POM)
5	Ceramic Disc	Al <sub>2</sub> O <sub>3</sub> 96%
6	Seat	Acetal(POM+GF)
7	inner Packing	Silicone
8	Out Packing	Silicone or NBR
9	O-Ring on the seat	Silicone or NBR

### SCC A

NO	Cartridge Component	Material
1	Housing	Noryl(PPO)
2	Lever	Nylon(PA6+GF)
3	Pin	SUS
4	Slider	Acetal(POM)
5	Ceramic Disc	Al <sub>2</sub> O <sub>3</sub> 96%
6	Seat	Noryl(PPO+GF)
7	inner Packing	Silicone
8	Out Packing	Silicone
9	O-Ring on the seat	Silicone or NBR

### SCC SM

NO	Cartridge Component	Material
1	Housing	Acetal(POM+GF)
2	Lever	Nylon(PA6+GF)
3	Pin	SUS
4	Slider	Acetal(POM)
5	Disc Cover	Acetal(POM)
6	Disc Cover O-ring	Silicone or EPDM
7	Ceramic Disc	Al <sub>2</sub> O <sub>3</sub> 96% or SIC
8	Inner Packing	Silicone or EPDM
9	Seat	POM+GF25%
10	Out Packing	Silicone or EPDM
11	O-Ring on the seat	Silicone or NBR



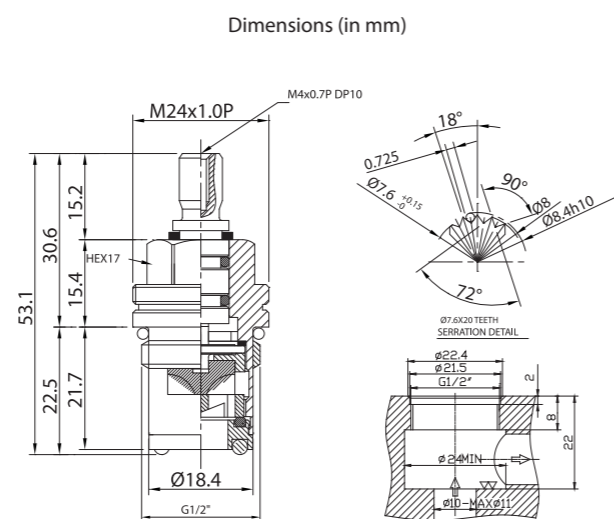
## HEADWORK CARTRIDGE

- BRASS HEADWORK CARTRIDGE
- LINEAR HEADWORK CARTRIDGE
- PLASTIC HEADWORK CARTRIDGE

# S.C.C.<sup>®</sup> HEADWORK CARTRIDGE

## SCC S1015-RO

### 1/2" Ceramic Headwork

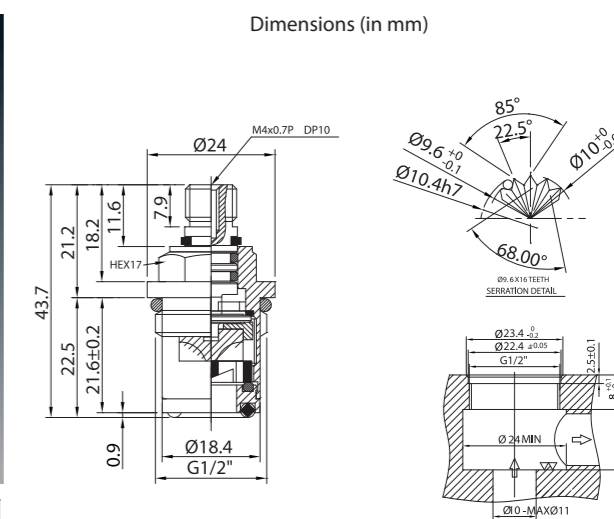


1. A-TYPE LEFT – RIGHT : CLOSE ☉  
RED O-RING
2. B-TYPE RIGHT – LEFT : CLOSE ☉  
BLUE O-RING  
V-cutting for Housing

Max. Opening Angle	90°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 50bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	15~18 ℓ/min
	(at 2bar)	23~25 ℓ/min
	(at 3bar)	28~32 ℓ/min
Endurance Test	500,000 cycle	

## SCC S1030-KO

### 1/2" Ceramic Headwork

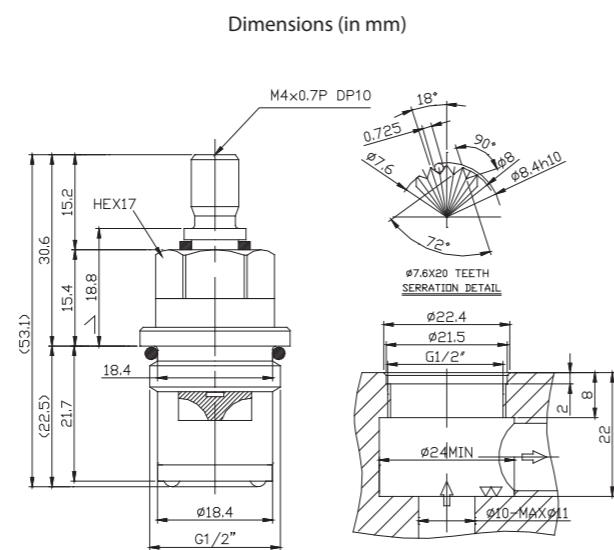


1. A-TYPE LEFT – RIGHT : CLOSE ☉  
RED O-RING
2. B-TYPE RIGHT – LEFT : CLOSE ☉  
BLUE O-RING  
V-cutting for Housing

Max. Opening Angle	90°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 50bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	15~18 ℓ/min
	(at 2bar)	23~25 ℓ/min
	(at 3bar)	28~32 ℓ/min
Endurance Test	500,000 cycle	

## SCC S1015-SO

### 1/2" Ceramic Headwork

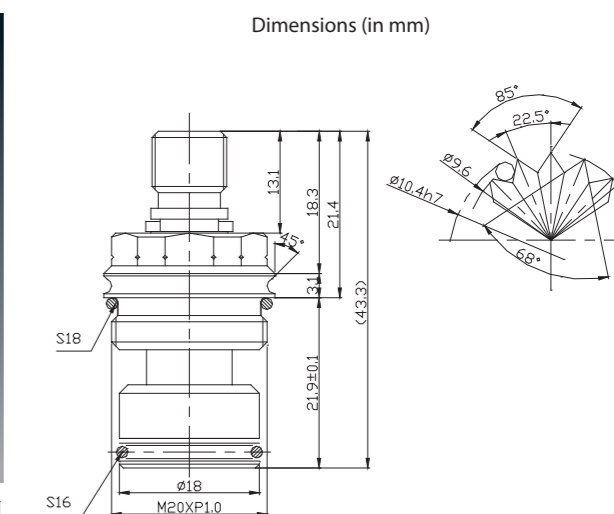


1. A-TYPE LEFT – RIGHT : CLOSE ☉  
RED O-RING
2. B-TYPE RIGHT – LEFT : CLOSE ☉  
BLUE O-RING  
V-cutting for Housing

Max. Opening Angle	90°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 50bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	15~18 ℓ/min
	(at 2bar)	23~25 ℓ/min
	(at 3bar)	28~32 ℓ/min
Endurance Test	500,000 cycle	

## SCC S1062-NO

### M20 Ceramic Headwork



1. A-TYPE LEFT – RIGHT : CLOSE ☉  
RED O-RING
2. B-TYPE RIGHT – LEFT : CLOSE ☉  
BLUE O-RING  
V-cutting for Housing

Max. Opening Angle	90°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 50bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	9~10 ℓ/min
	(at 2bar)	13~14 ℓ/min
	(at 3bar)	17~18 ℓ/min
Endurance Test	500,000 cycle	



# S.C.C.<sup>®</sup> HEADWORK CARTRIDGE

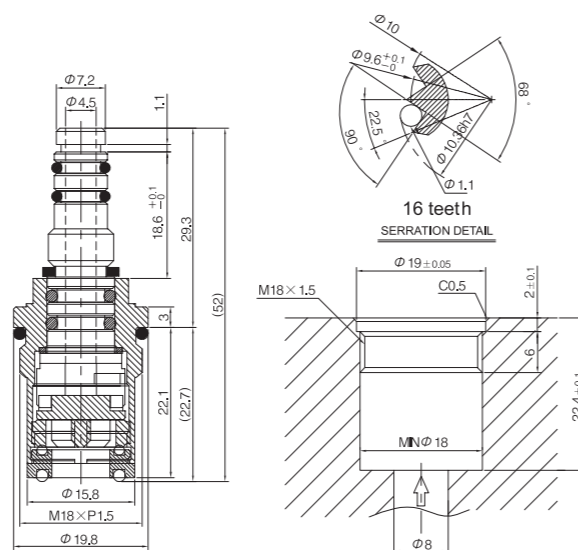
## SCC S1062-TO

### Linear Water Flow Headwork



Max. Opening Angle	90°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 50bar	
Working Torque (Operation distance 100mm standard)	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	9~10 ℓ/min
	(at 2bar)	13~14 ℓ/min
	(at 3bar)	17~18 ℓ/min
Endurance Test	500,000 cycle	

Dimensions (in mm)



1. A-TYPE LEFT → RIGHT : CLOSE (⊙)  
RED O-RING
2. B-TYPE RIGHT → LEFT : CLOSE (⊙)  
BLUE O-RING  
V-cutting for Housing

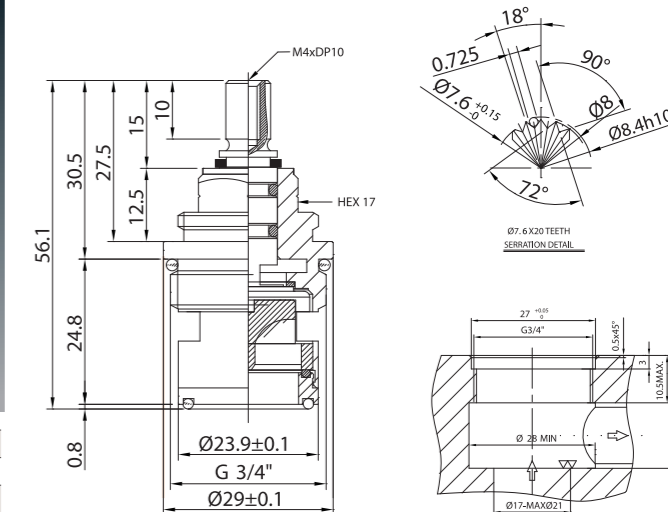
## SCC S1091-SO

### 3/4" Ceramic Headwork



Max. Opening Angle	90°	
Nut Torque	10 ~ 11 Nm	
Water Resistance Pressure	Max. 50bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	23~25 ℓ/min
	(at 2bar)	31~33 ℓ/min
	(at 3bar)	40~48 ℓ/min
Endurance Test	500,000 cycle	

Dimensions (in mm)



1. A-TYPE LEFT → RIGHT : CLOSE (⊙)  
RED O-RING
2. B-TYPE RIGHT → LEFT : CLOSE (⊙)  
BLUE O-RING  
V-cutting for Housing

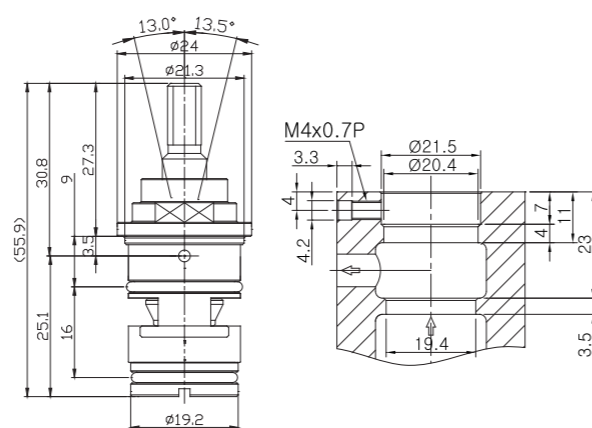
## SCC S1087-OO

### Linear Ceramic Headwork



Max. Opening Angle	26.5°	
Water Resistant Pressure	Max. 35bar	
Working Torque (Operation distance 100mm standard)	Max 0.07~0.1 Nm	
Max. Temperature	90°C	
Flow Rate	(at 1bar)	9~10 ℓ/min
	(at 2bar)	12~13 ℓ/min
	(at 3bar)	15~16 ℓ/min
Endurance Test	500,000cycle	

Dimensions (in mm)



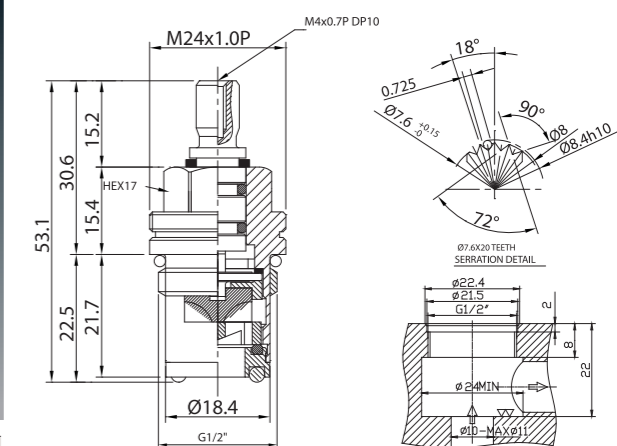
## SCC S1015-PO

### 1/2" Plastic Ceramic Headwork



Max. Opening Angle	90°	
Nut Torque	9 ~ 10 Nm	
Water Resistance Pressure	Max. 50bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	15~18 ℓ/min
	(at 2bar)	23~25 ℓ/min
	(at 3bar)	28~32 ℓ/min
Endurance Test	500,000 cycle	

Dimensions (in mm)



1. A-TYPE LEFT → RIGHT : CLOSE (⊙)
2. B-TYPE RIGHT → LEFT : CLOSE (⊙)  
V-cutting for Sindle

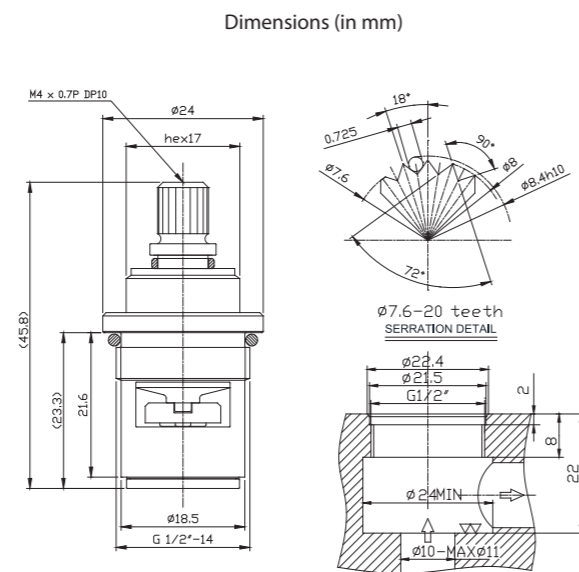
# S.C.C<sup>®</sup> HEADWORK CARTRIDGE

SCC S1030-PO

1/2" Plastic Ceramic Headwork



Max. Opening Angle	90°	
Nut Torque	9 ~ 10 Nm	
Water Resistance Pressure	Max. 50bar	
Working Torque	Max. 0.5 Nm	
Max. Temperature	90°C	
Max. Noise Level	15 ~ 18db	
Flow Rate	(at 1bar)	15~18 ℓ/min
	(at 2bar)	23~25 ℓ/min
	(at 3bar)	28~32 ℓ/min
Endurance Test	500,000 cycle	



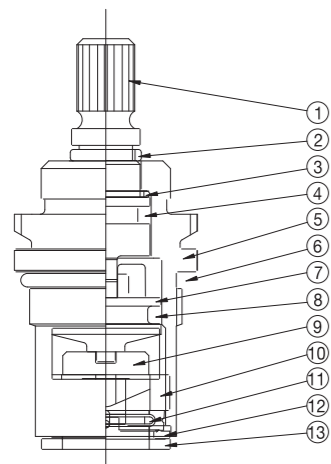
1. A-TYPE LEFT → RIGHT : CLOSE ☉

2. B-TYPE RIGHT → LEFT : CLOSE ☉

V-cutting for Spindle



## Plastic Headwork Materials



NO	DESCRIPTION	MATERIAL
1	SPINDLE	BS
2	SNAP RING	BS
3	HOUSING WASHER	POM
4	O-RING	NBR
5	HOUSING	PPS + GF 30%
6	O-RING	NBR
7	DISC COVER	PPS + GF 30%
8	O-RING	NBR
9	CERAMIC UPPER	Al2O3 96%
10	CERAMIC LOWER	Al2O3 96%
11	PACKING WASHER	POM
12	PACKING GUIDE	PPO
13	OUTER PACKING	SILICONE



## THERMOSTATIC CARTRIDGE

BRASS THERMOSTATIC CARTRIDGE

PLASTIC THERMOSTATIC CARTRIDGE

SMA THERMOSTATIC CARTRIDGE



# S.C.C<sup>®</sup> THERMOSTATIC CARTRIDGE



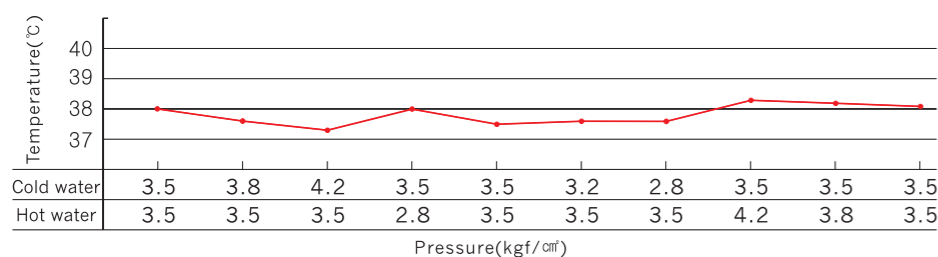
The S.C.C Thermostatic cartridge is assembled by the very delicate sensor and finely wrought brass parts, so only this one can react such tiny changes in temperature.

It is designed to improve our home life by using constant temperature of water in the change of water pressure. It can provide excellent service to you with high quality.

## Technical Data

- Turning angle : 330°
- Temperature range : 20~50°C
- Temperature stop : 38°C or 40°C
- Inlet water supply temperature : Hot water 70°C, Cold water 15~25°C
- Outlet water temperature adjusted on 38°C±1.5°C
- Outlet flow rate adjusted on 38°C : 20ℓ/min at 3bar
- Operating pressure : 0.5~6 bar
- Recommend pressure : 1~5bar
- Life cycle : 100,000 cycle

## Temperature Variation Test

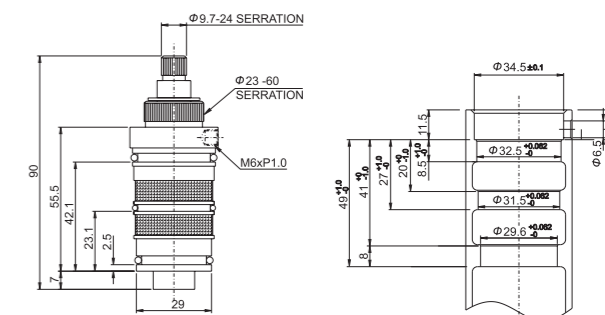


## SCC TH100

## Thermostatic Cartridge



Dimensions (in mm)



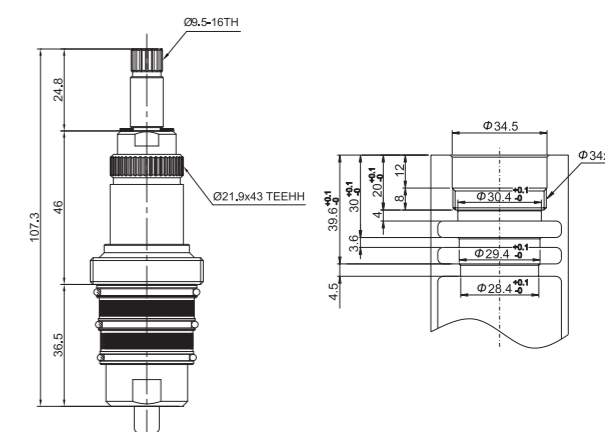
Turning angle	330°
Temperature range	20~50°C
Temperature stop	38°C or 40°C
Inlet water supply temperature	Hot water 70°C Cold water 15°C
Outlet water temperature adjusted on 38°C	38°C±1.5°C
Outlet flow rate adjusted on 38°C	20ℓ / min (3bar)
Operating pressure	0.5~6bar(0.05~0.6Mpa)
Recommend pressure	1~5bar(0.1~0.5Mpa)
Life cycle	100,000 cycles

## SCC TH200

## Thermostatic Cartridge



Dimensions (in mm)



Turning angle	330°
Temperature range	20~50°C
Temperature stop	38°C or 40°C
Inlet water supply temperature	Hot water 70°C Cold water 15°C
Outlet water temperature adjusted on 38°C	38°C±1.5°C
Outlet flow rate adjusted on 38°C	20ℓ / min (3bar)
Operating pressure	0.5~6bar(0.05~0.6Mpa)
Recommend pressure	1~5bar(0.1~0.5Mpa)
Life cycle	100,000 cycles

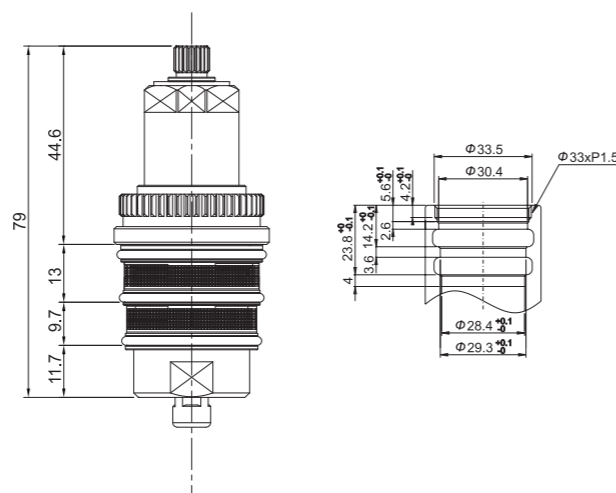
# S.C.C.<sup>®</sup> THERMOSTATIC CARTRIDGE

## SCC TH300

## Thermostatic Cartridge



Dimensions (in mm)



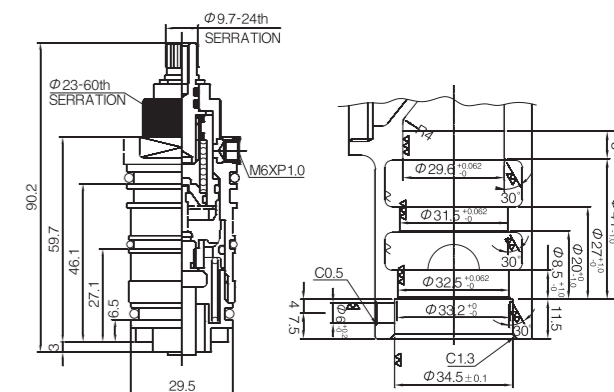
Turning angle	330°
Temperature range	20~50°C
Temperature stop	38°C or 40°C
Inlet water supply temperature	Hot water 70°C Cold water 15°C
Outlet water temperature adjusted on 38°C	38°C±1.5°C
Outlet flow rate adjusted on 38°C	20ℓ / min (3bar)
Operating pressure	0.5~6bar(0.05~0.6Mpa)
Recommend pressure	1~5bar(0.1~0.5Mpa)
Life cycle	100,000 cycles

## SCC TH100P

## Plastic Thermostatic Cartridge

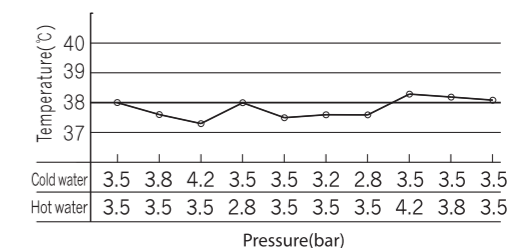


Dimensions (in mm)



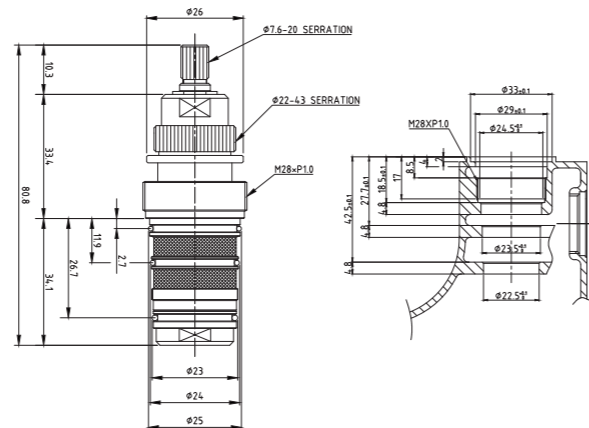
Turning angle	330°
Temperature range	20~50°C
Temperature stop	38°C or 40°C
Inlet water supply temperature	Hot water 70°C Cold water 15°C
Outlet water temperature adjusted on 38°C	38°C±1.5°C
Outlet flow rate adjusted on 38°C	20ℓ / min (3bar)
Operating pressure	0.5~6bar(0.05~0.6Mpa)
Recommend pressure	1~5bar(0.1~0.5Mpa)
Life cycle	100,000 cycles

### Temperature Variation Test



## SCC TH800

Dimensions (in mm)



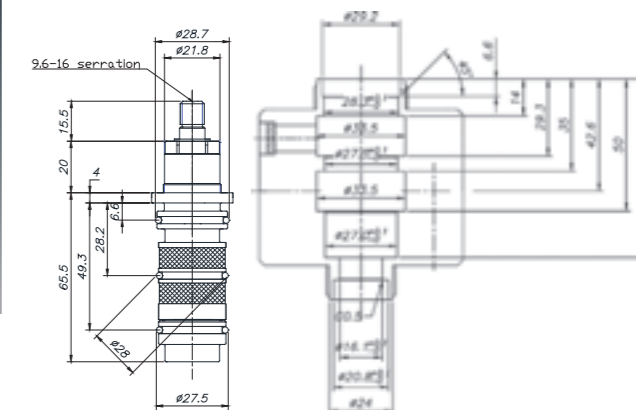
Turning angle	330°
Temperature range	20~50°C
Temperature stop	38°C or 40°C
Inlet water supply temperature	Hot water 70°C Cold water 15°C
Outlet water temperature adjusted on 38°C	38°C±1.5°C
Outlet flow rate adjusted on 38°C	20ℓ / min (3bar)
Operating pressure	0.5~6bar(0.05~0.6Mpa)
Recommend pressure	1~5bar(0.1~0.5Mpa)
Life cycle	100,000 cycles

## SCC TH700

## SMA (Shape Memory Alloys) Cartridge



Dimensions (in mm)



Nut Torque	10 ~ 11 Nm
Water Resistance Pressure	Max. 35bar
Working Torque (Operation distance 100mm standard)	Max. 0.08 Nm
Max. Temperature	90°C
Max. Noise Level	15 ~ 18db
Flow Rate	Min. 23~24 ℓ/min (3bar)
Endurance Test	100,000 cycle



# CERTIFICATIONS

