

KORTEC

Long life time, Low noise,
Smooth operation and Constant water flow.
That's what we have.



EL ENTERPRISE CO., LTD.

ELN INNOVATIVE MANUFACTURER



A company pursuing only its profit can not satisfied customers.

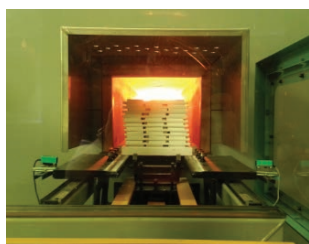
EL ENTERPRISE will put first priority on the customers' demand and their interest in the process of product development.

We are not only producing very precise ceramic valve products with our accumulated technology, but also doing our best to supply safe products and additional value to our customers through accurate product facilities and perfect quality control.

Moreover, the technology team is composed of the best staffs with best technologies and exchanges high technologies including development of new technology with other foreign companies to expand the export.

We will do all we can do to provide the best products in responding clients' demand any time.

Thank you.



QUALITY MANAGEMENT SYSTEM

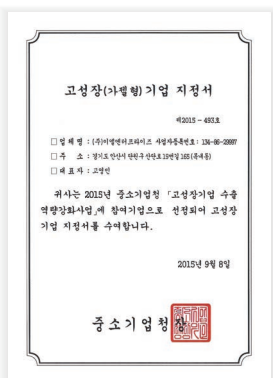
ISO 9001:2008



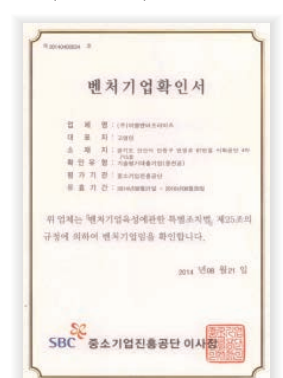
ISO 14001:2004

Complete Charge R&D
Center Certification

2015 High-growth Firm Certification



Main - Biz Certification

Korea Venture
Entrepreneurship Certification

NSF International



2015 Certificate of Good Design Selection



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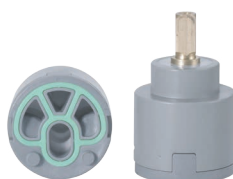
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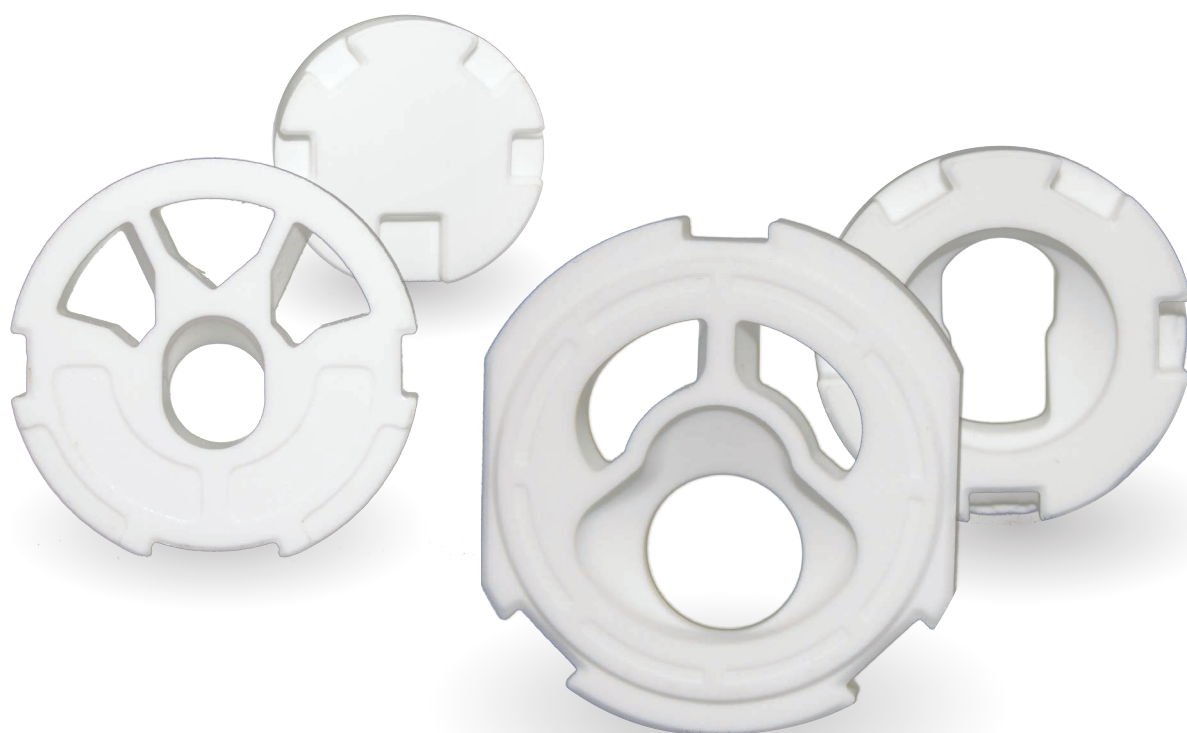
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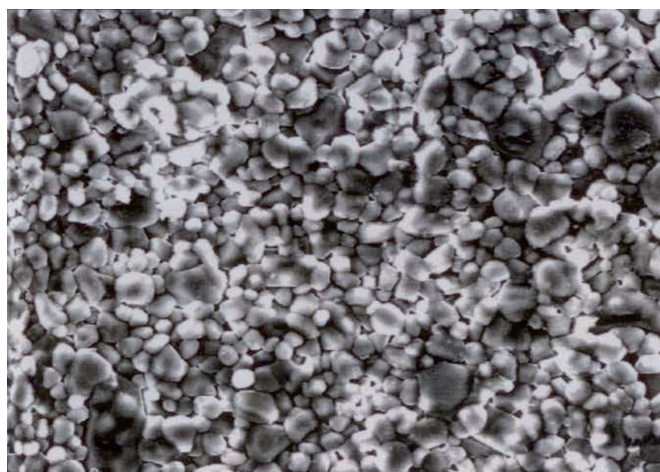




CERAMIC DISC



| Low magnification X 100

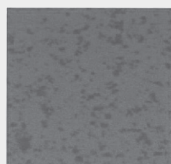


| High magnification X 200

Surfcorder SE-30D

U 5000
H 100
L 2.5mm
Filter N Phase type
 λ_c 0.8mm
Stylus 5 μ m
Drive speed 0.1mm/s
Ra 0.050 μ m

Rmax 1.624 μ m
Rz 1.196 μ m
F Profile

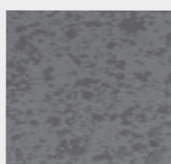
Ra 0.050 μ m

SBA 80%

Surfcorder SE-30D

U 5000
H 100
L 2.5mm
Filter N Phase type
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Stylus 5 μ m
Drive speed 0.1mm/s
Ra 0.100 μ m

Rmax 1.918 μ m
Rz 1.447 μ m
F Profile

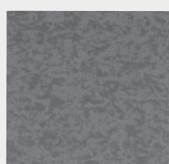
Ra 0.100 μ m

SBA 65%

Surfcorder SE-30D

U 5000
H 100
L 2.5mm
Filter N Phase type
 λ_c 0.8mm
Stylus 5 μ m
Drive speed 0.1mm/s
Ra 0.200 μ m

Rmax 2.954 μ m
Rz 2.595 μ m
F Profile

Ra 0.200 μ m

SBA 50%

Product quality & Characteristics

Thickness

ELN standard Thickness : 0.025mm / 0.05mm

Parallerism

ELN standard Parallerism : 0.005mm

Flatness

ELN standard Flatness : 0.0006 μ m

Roughness

ELN standard Roughness : Ra 0.1 ~ 0.3 μ m

Surface Bearing Area

ELN standard Surface Bearing Area : SBA 50 ~ 80%

Pressing



Sintering



Lapping



Polishing



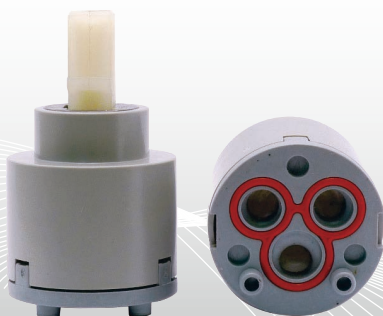
KORTEC

**CERAMIC
CARTRIDGE**
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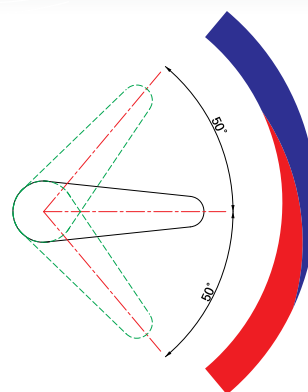
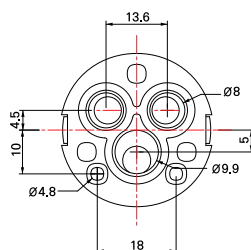
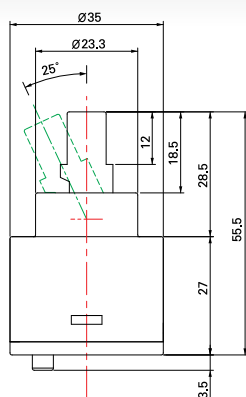


CERAMIC CARTRIDGE

35AR



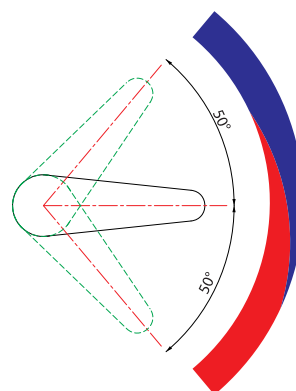
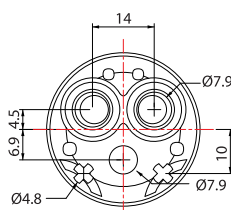
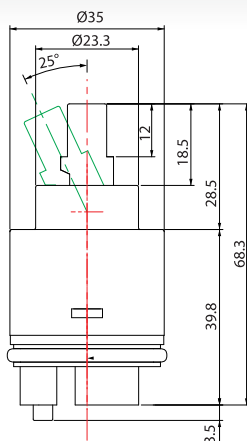
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Mixing Angle	100°
Nut Torque	10~11 Nm
Water Resistance Pressure	Max. 35bar
Working Torque	Max. 0.5kgf·cm
Temperature	Max. 90 °C
Noise Level	Max. 15~18 db
Flow Rate (at 3bar)	23~25 ℓ/min
Life Cycle Test	500,000 cycles



35AF



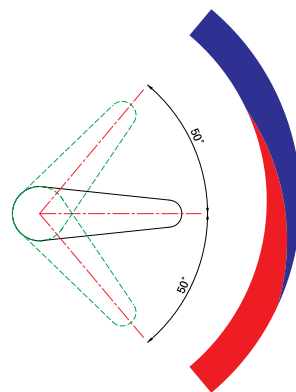
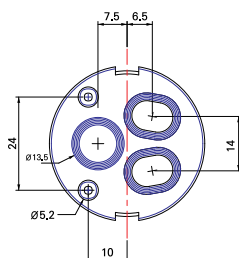
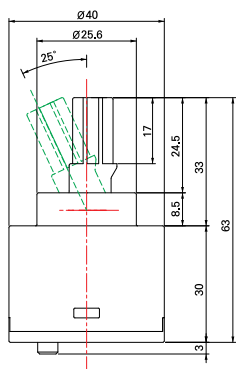
Opening Angle	Max. 25°
Mixing Angle	100°
Nut Torque	10~11 Nm
Water Resistance Pressure	Max. 35bar
Working Torque	Max. 0.5kgf·cm
Temperature	Max. 90 °C
Noise Level	Max. 15~18 db
Flow Rate (at 3bar)	23~25 ℓ/min
Life Cycle Test	500,000 cycles



40AR



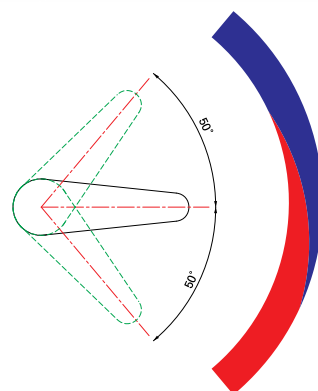
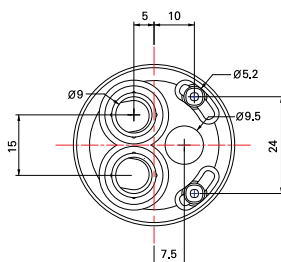
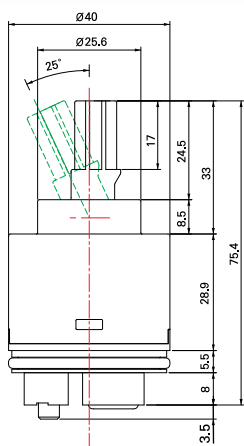
Opening Angle	Max. 25°
Mixing Angle	100°
Nut Torque	10~11 Nm
Water Resistance Pressure	Max. 35bar
Working Torque	Max. 0.5kgf·cm
Temperature	Max. 90 °C
Noise Level	Max. 15~18 db
Flow Rate (at 3bar)	23~25 ℓ/min
Life Cycle Test	500,000 cycles



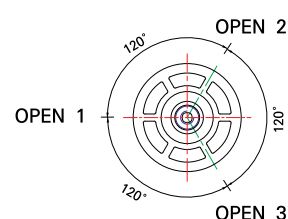
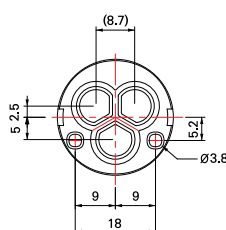
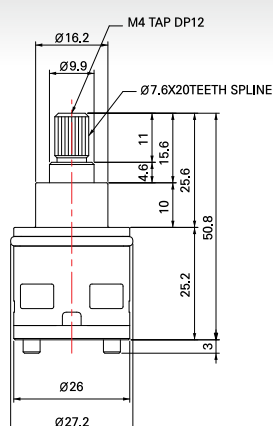
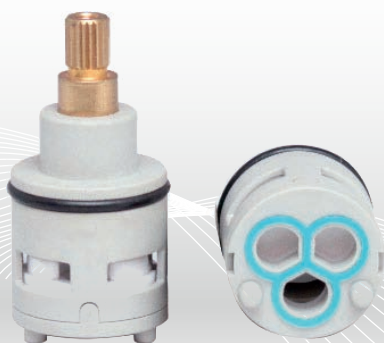
40AF



Opening Angle	Max. 25°
Mixing Angle	100°
Nut Torque	10~11 Nm
Water Resistance Pressure	Max. 35bar
Working Torque	Max. 0.5kgf·cm
Temperature	Max. 90 °C
Noise Level	Max. 15~18 db
Flow Rate (at 3bar)	23~25 ℓ/min
Life Cycle Test	500,000 cycles



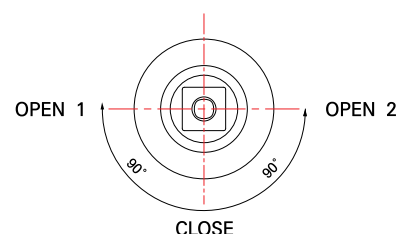
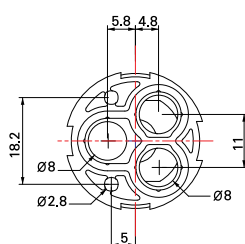
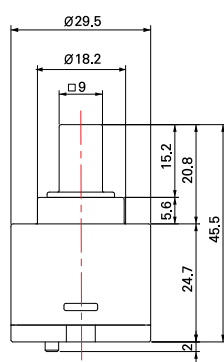
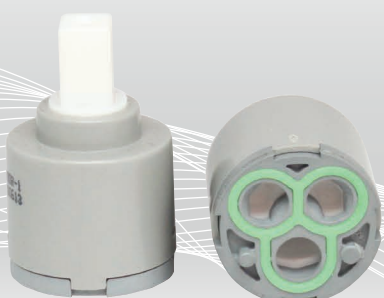
26DR - 01



3-WAY

Working Angle	360°
Nut Torque	9~10 Nm
Water Resistance Pressure	Max. 25bar
Working Torque	Max. 0.5kgf·cm
Temperature	Max. 90 °C
Noise Level	Max. 15~18 db
Flow Rate (at 3bar)	23~25 ℓ/min
Life Cycle Test	500,000 cycles

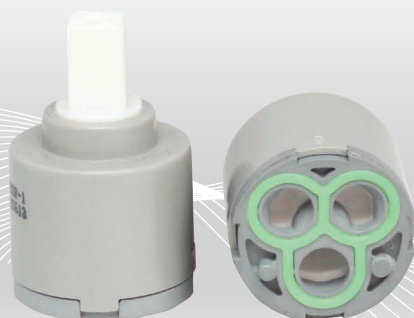
29DR - 01



2-WAY (STOP FUNCTION)

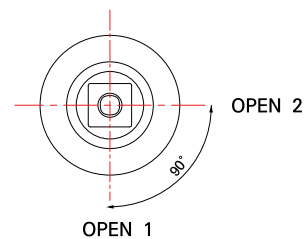
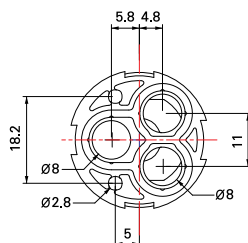
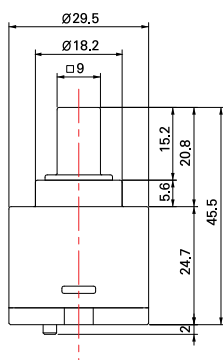
Working Angle	Max. 180°
Nut Torque	9~10 Nm
Water Resistance Pressure	Max. 25bar
Working Torque	Max. 0.5kgf·cm
Temperature	Max. 90 °C
Noise Level	Max. 15~18 db
Flow Rate (at 3bar)	23~25 ℓ/min
Life Cycle Test	500,000 cycles

29DR - 02

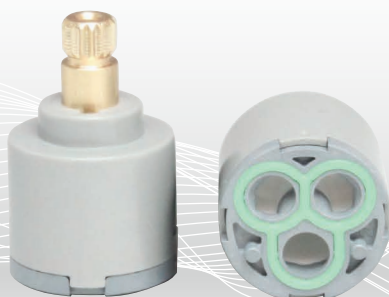


2-WAY

Working Angle	Max. 90°
Nut Troque	9~10 Nm
Water Resistance Pressure	Max. 25bar
Working Torque	Max. 0.5kgf.cm
Temperature	Max. 90°C
Noise Level	Max. 15~18 db
Flow Rate (at 3bar)	23~25 ℓ/min
Life Cycle Test	500,000 cycles

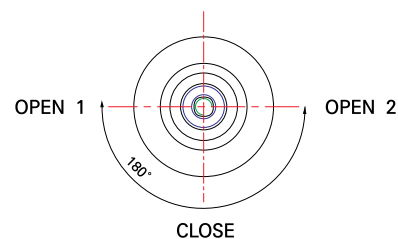
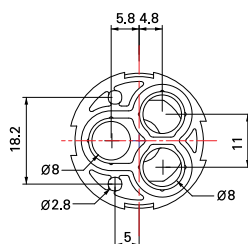
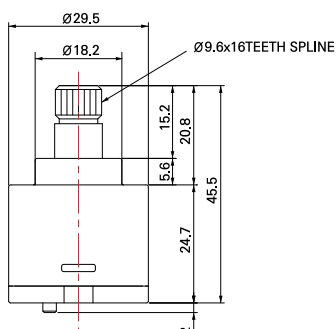


29DR - 03

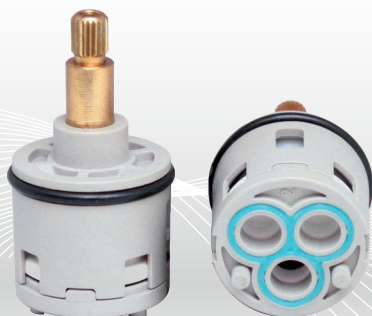


2-WAY (STOP FUNCTION)

Working Angle	Max. 180°
Nut Troque	9~10 Nm
Water Resistance Pressure	Max. 25bar
Working Torque	Max. 0.5kgf.cm
Temperature	Max. 90°C
Noise Level	Max. 15~18 db
Flow Rate (at 3bar)	23~25 ℓ/min
Life Cycle Test	500,000 cycles

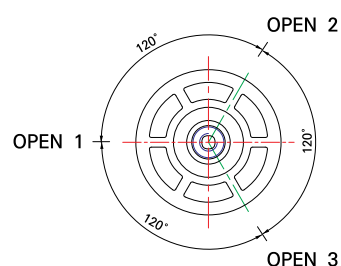
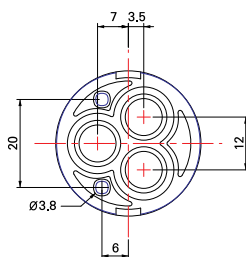
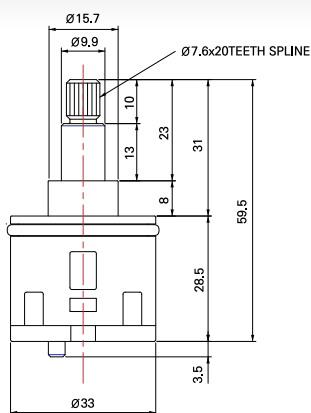


33DR - 01

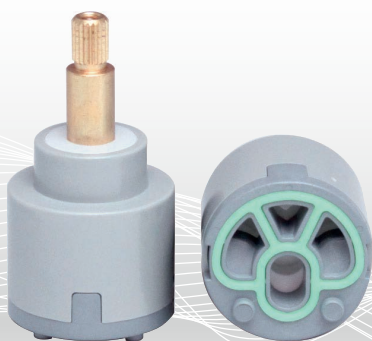


3-WAY

Working Angle	360°
Nut Troque	9~10 Nm
Water Resistance Pressure	Max. 25bar
Working Torque	Max. 0.5kgf.cm
Temperature	Max. 90 °C
Noise Level	Max. 15~18 db
Flow Rate (at 3bar)	23~25 ℓ/min
Life Cycle Test	500,000 cycles

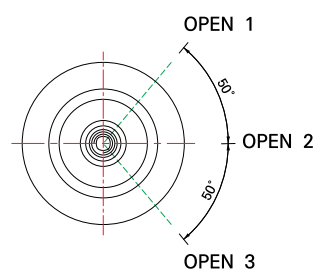
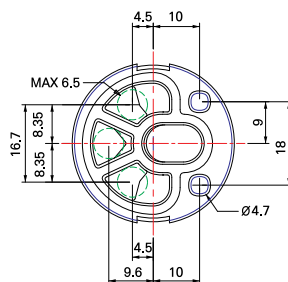
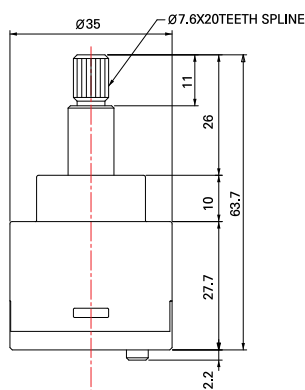


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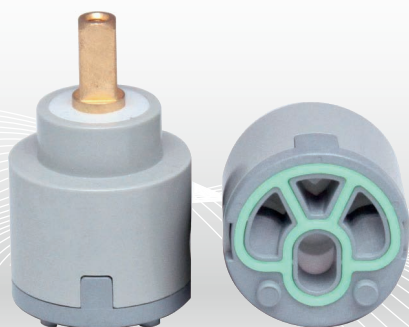


3-WAY

Working Angle	Max. 100°
Nut Troque	9~10 Nm
Water Resistance Pressure	Max. 25bar
Working Torque	Max. 0.5kgf.cm
Temperature	Max. 90 °C
Noise Level	Max. 15~18 db
Flow Rate (at 3bar)	23~25 ℓ/min
Life Cycle Test	500,000 cycles

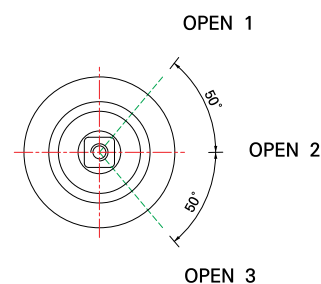
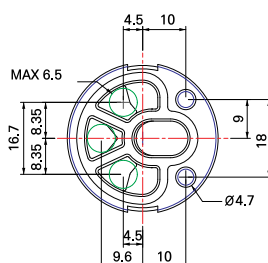
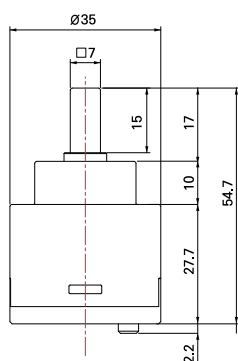


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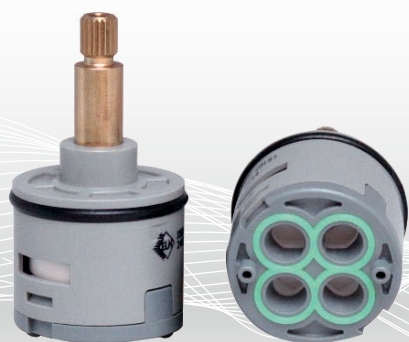


3-WAY

Working Angle	Max. 100°
Nut Troque	9~10 Nm
Water Resistance Pressure	Max. 25bar
Working Torque	Max. 0.5kgf·cm
Temperature	Max. 90 °C
Noise Level	Max. 15~18 db
Flow Rate (at 3bar)	23~25 ℓ/min
Life Cycle Test	500,000 cycles

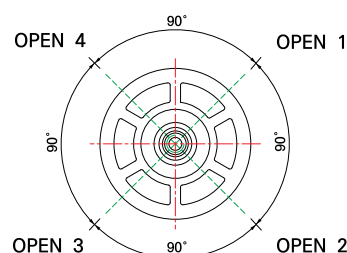
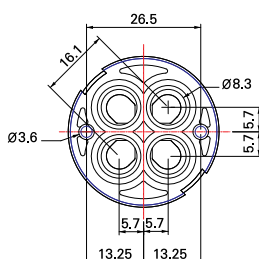
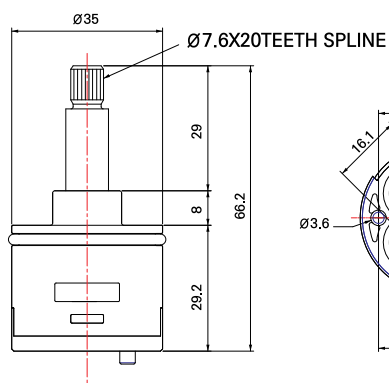


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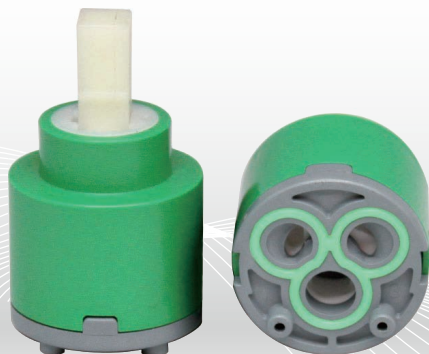


4-WAY

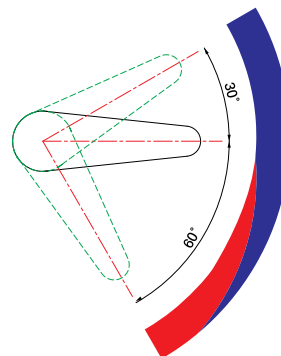
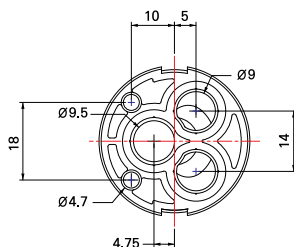
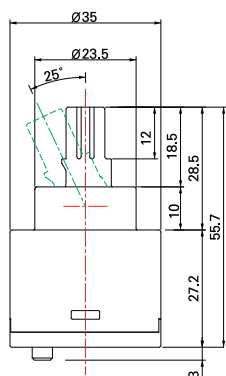
Working Angle	Max. 360°
Nut Troque	9~10 Nm
Water Resistance Pressure	Max. 25bar
Working Torque	Max. 0.5kgf·cm
Temperature	Max. 90 °C
Noise Level	Max. 15~18 db
Flow Rate (at 3bar)	23~25 ℓ/min
Life Cycle Test	500,000 cycles



35ER



Opening Angle	Max. 25°
Mixing Angle	90°
Nut Torque	10~11 Nm
Water Resistance Pressure	Max. 35bar
Working Torque	Max. 0.5kgf·cm
Temperature	Max. 90 °C
Noise Level	Max. 15~18 db
Flow Rate (at 3bar)	20~23 ℓ/min
Life Cycle Test	500,000 cycles

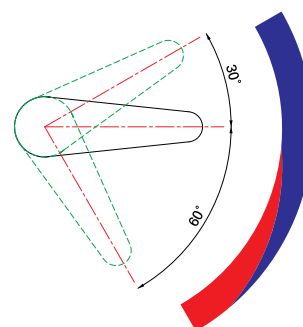
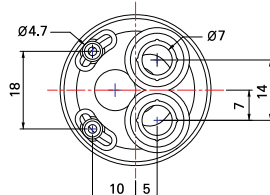
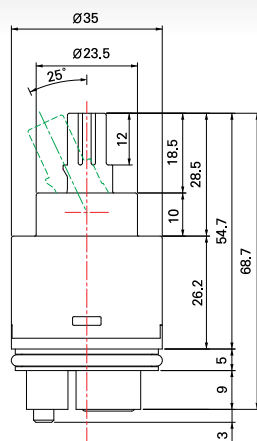


(ECO)

35EF

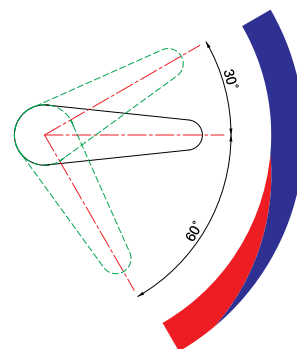
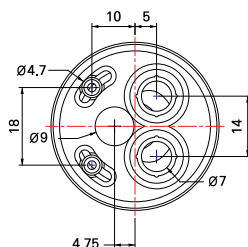
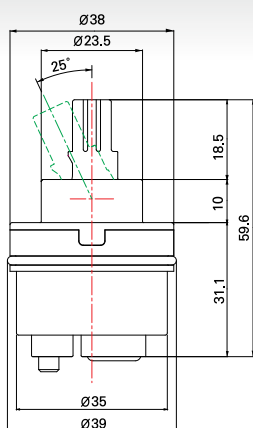
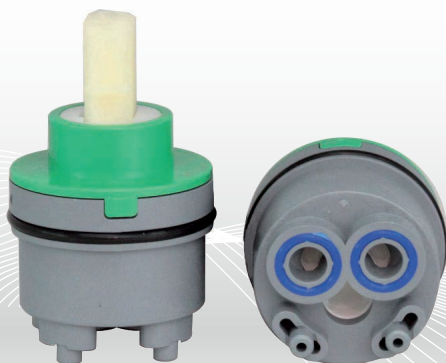


Opening Angle	Max. 25°
Mixing Angle	90°
Nut Torque	10~11 Nm
Water Resistance Pressure	Max. 35bar
Working Torque	Max. 0.5kgf·cm
Temperature	Max. 90 °C
Noise Level	Max. 15~18 db
Flow Rate (at 3bar)	20~23 ℓ/min
Life Cycle Test	500,000 cycles



(ECO)

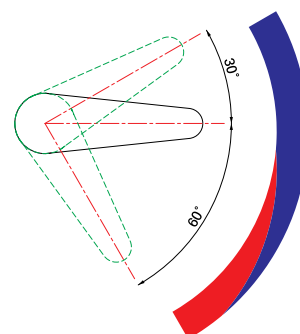
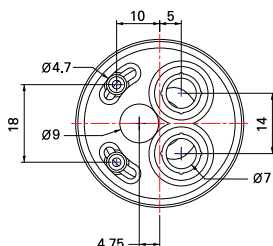
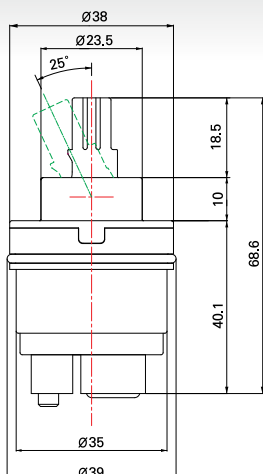
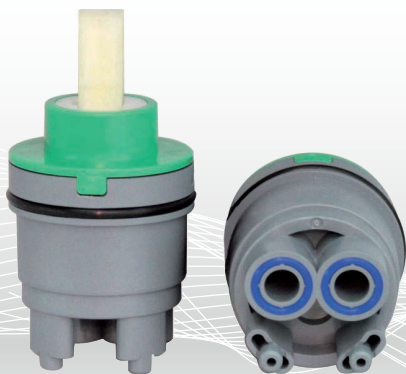
38ER



(ECO)

Opening Angle	Max. 25°
Mixing Angle	90°
Nut Torque	10~11 Nm
Water Resistance Pressure	Max. 35bar
Working Torque	Max. 0.5kgf·cm
Temperature	Max. 90 °C
Noise Level	Max. 15~18 db
Flow Rate (at 3bar)	20~23 ℓ/min
Life Cycle Test	500,000 cycles

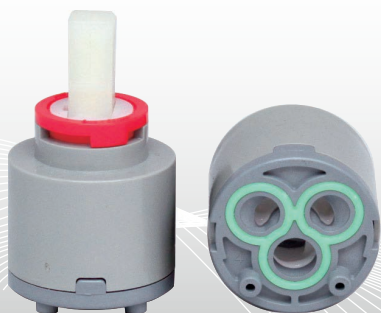
38EF



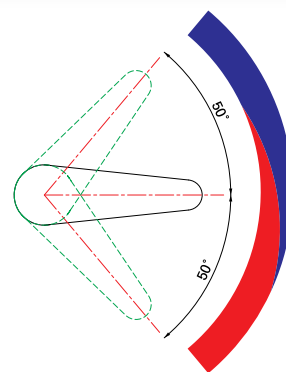
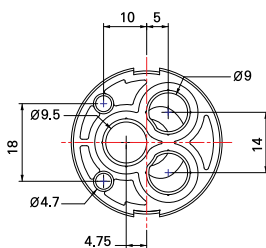
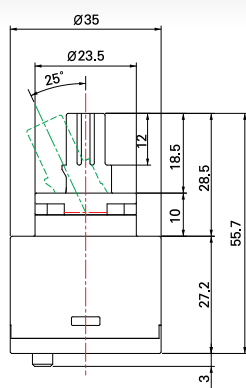
(ECO)

Opening Angle	Max. 25°
Mixing Angle	90°
Nut Torque	10~11 Nm
Water Resistance Pressure	Max. 35bar
Working Torque	Max. 0.5kgf·cm
Temperature	Max. 90 °C
Noise Level	Max. 15~18 db
Flow Rate (at 3bar)	20~23 ℓ/min
Life Cycle Test	500,000 cycles

35HR



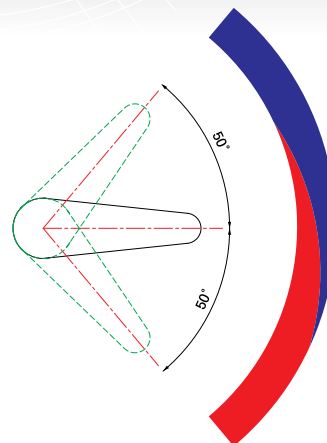
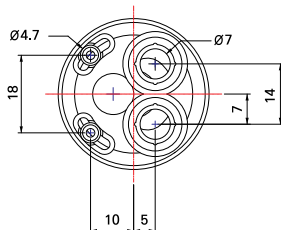
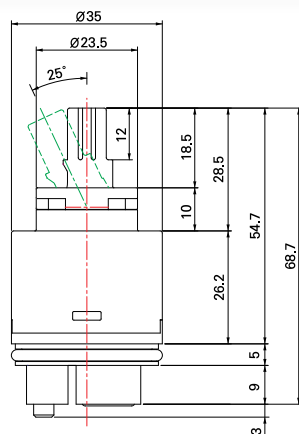
Opening Angle	Max. 25°
Mixing Angle	90° or 100°
Nut Torque	10~11 Nm
Water Resistance Pressure	Max. 35bar
Working Torque	Max. 0.5kgf·cm
Temperature	Max. 90 °C
Noise Level	Max. 15~18 db
Flow Rate (at 3bar)	23~25 ℓ/min
Life Cycle Test	500,000 cycles



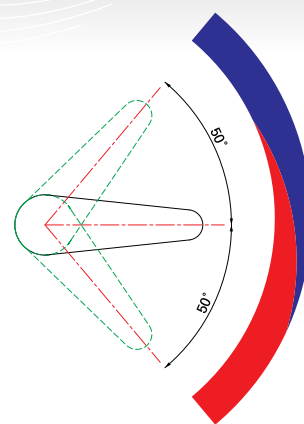
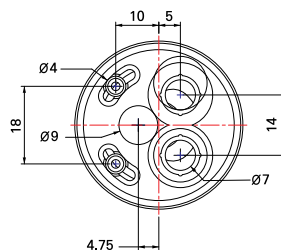
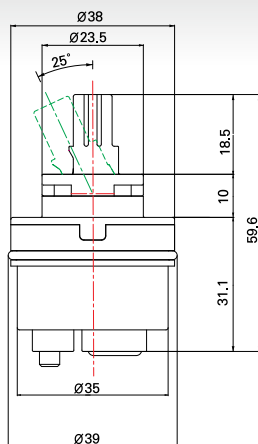
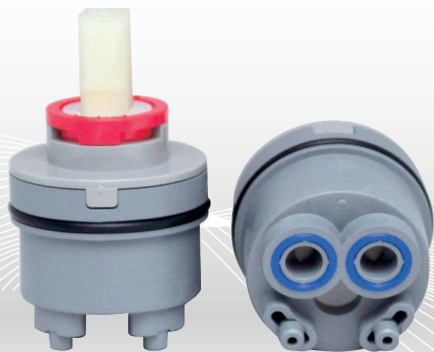
35HF



Opening Angle	Max. 25°
Mixing Angle	90° or 100°
Nut Torque	10~11 Nm
Water Resistance Pressure	Max. 35bar
Working Torque	Max. 0.5kgf·cm
Temperature	Max. 90 °C
Noise Level	Max. 15~18 db
Flow Rate (at 3bar)	23~25 ℓ/min
Life Cycle Test	500,000 cycles

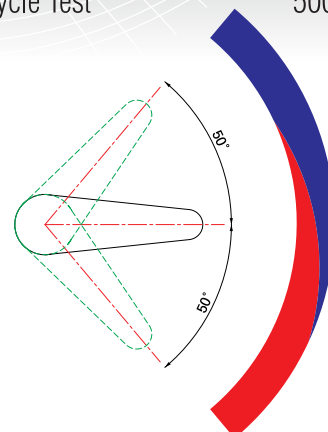
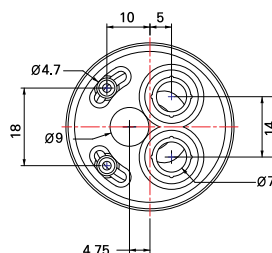
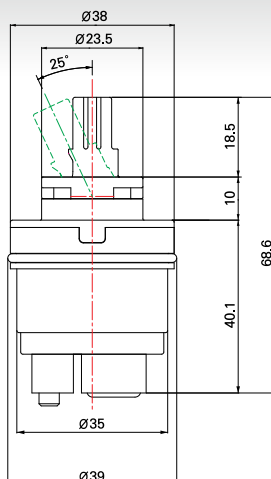
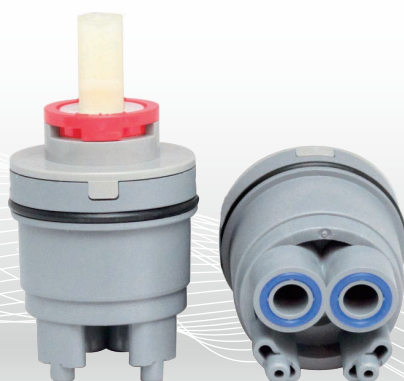


38HR



Opening Angle	Max. 25°
Mixing Angle	90° or 100°
Nut Torque	10~11 Nm
Water Resistance Pressure	Max. 35bar
Working Torque	Max. 0.5kgf·cm
Temperature	Max. 90 °C
Noise Level	Max. 15~18 db
Flow Rate (at 3bar)	23~25 ℓ/min
Life Cycle Test	500,000 cycles

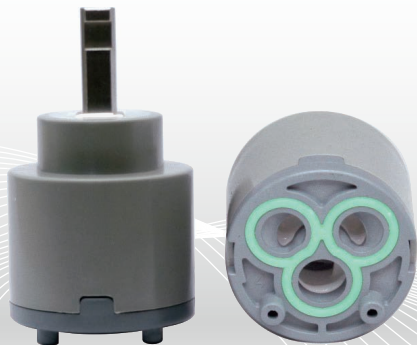
38HF



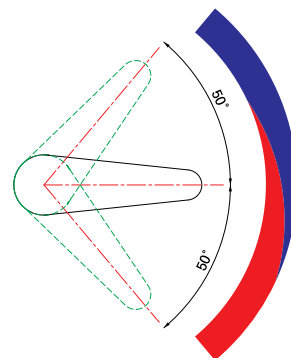
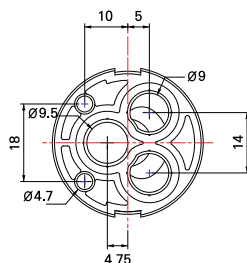
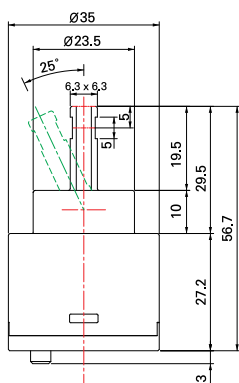
Opening Angle	Max. 25°
Mixing Angle	90° or 100°
Nut Torque	10~11 Nm
Water Resistance Pressure	Max. 35bar
Working Torque	Max. 0.5kgf·cm
Temperature	Max. 90 °C
Noise Level	Max. 15~18 db
Flow Rate (at 3bar)	23~25 ℓ/min
Life Cycle Test	500,000 cycles

CERAMIC CARTRIDGE SINGLE LEVER J - SERIES

35JR



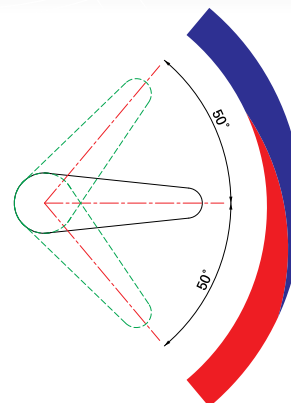
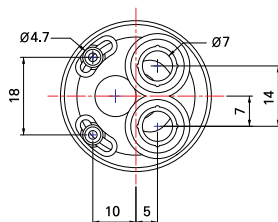
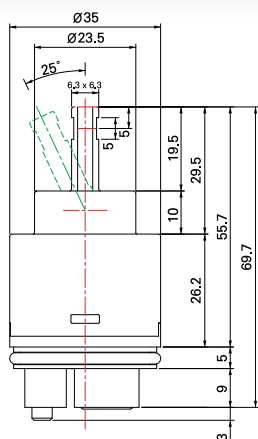
Opening Angle	Max. 25°
Mixing Angle	90° or 100°
Nut Torque	10~11 Nm
Water Resistance Pressure	Max. 35bar
Working Torque	Max. 0.5kgf·cm
Temperature	Max. 90 °C
Noise Level	Max. 15~18 db
Flow Rate (at 3bar)	23~25 ℓ/min
Life Cycle Test	500,000 cycles



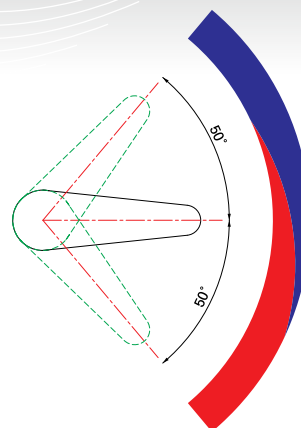
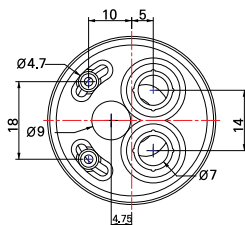
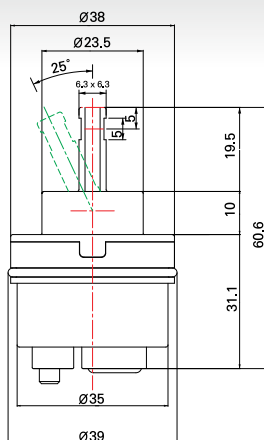
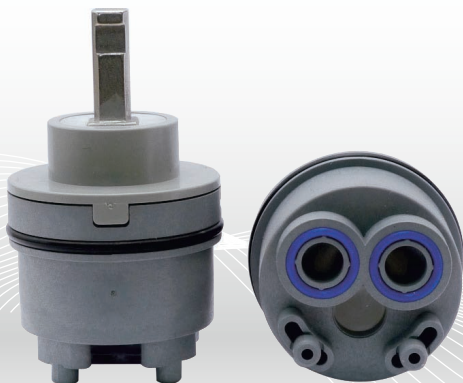
35JF



Opening Angle	Max. 25°
Mixing Angle	90° or 100°
Nut Torque	10~11 Nm
Water Resistance Pressure	Max. 35bar
Working Torque	Max. 0.5kgf·cm
Temperature	Max. 90 °C
Noise Level	Max. 15~18 db
Flow Rate (at 3bar)	23~25 ℓ/min
Life Cycle Test	500,000 cycles

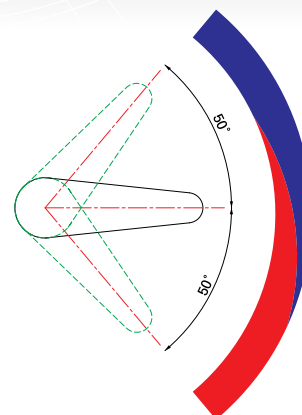
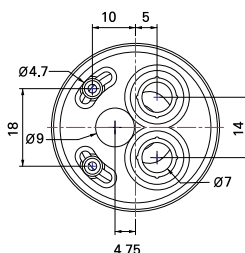
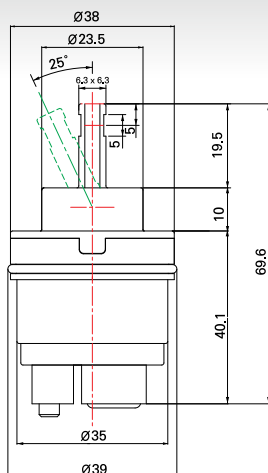
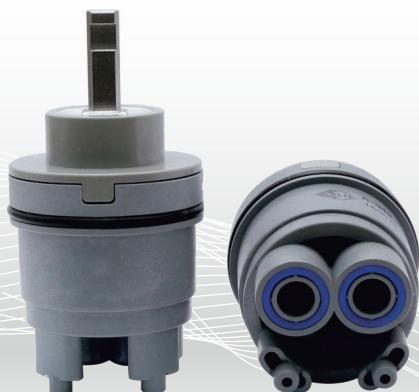


38JR



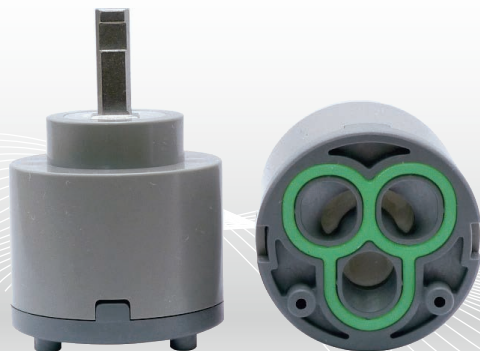
Opening Angle	Max. 25°
Mixing Angle	90° or 100°
Nut Torque	10~11 Nm
Water Resistance Pressure	Max. 35bar
Working Torque	Max. 0.5kgf·cm
Temperature	Max. 90 °C
Noise Level	Max. 15~18 db
Flow Rate (at 3bar)	23~25 ℓ/min
Life Cycle Test	500,000 cycles

38JF

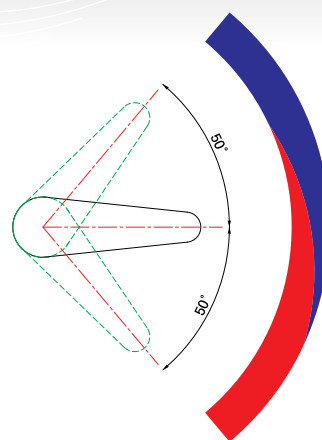
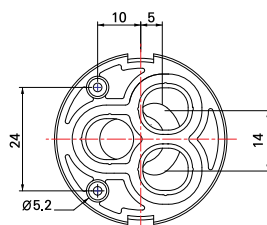
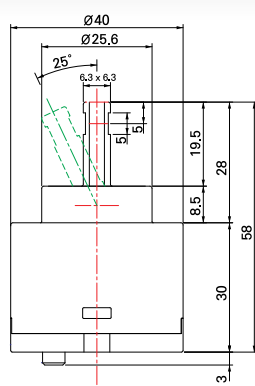


Opening Angle	Max. 25°
Mixing Angle	90° or 100°
Nut Torque	10~11 Nm
Water Resistance Pressure	Max. 35bar
Working Torque	Max. 0.5kgf·cm
Temperature	Max. 90 °C
Noise Level	Max. 15~18 db
Flow Rate (at 3bar)	23~25 ℓ/min
Life Cycle Test	500,000 cycles

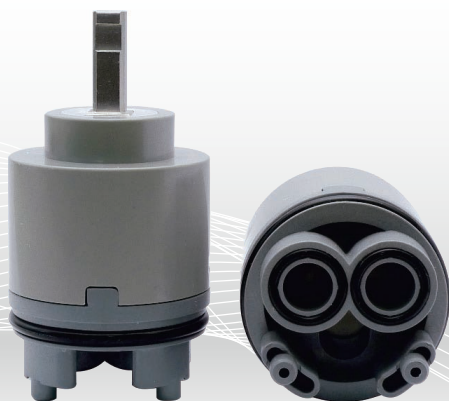
40JR



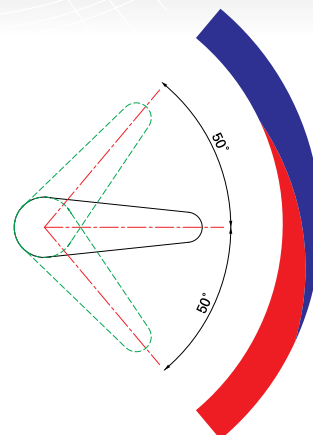
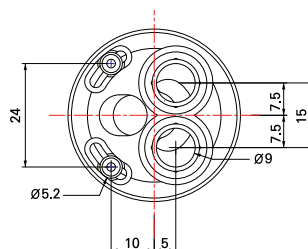
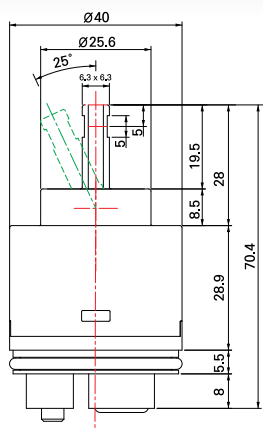
Opening Angle	Max. 25°
Mixing Angle	90° or 100°
Nut Torque	10~11 Nm
Water Resistance Pressure	Max. 35bar
Working Torque	Max. 0.5kgf·cm
Temperature	Max. 90 °C
Noise Level	Max. 15~18 db
Flow Rate (at 3bar)	23~25 ℓ/min
Life Cycle Test	500,000 cycles



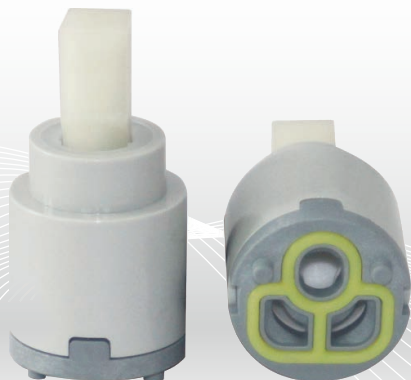
40JF



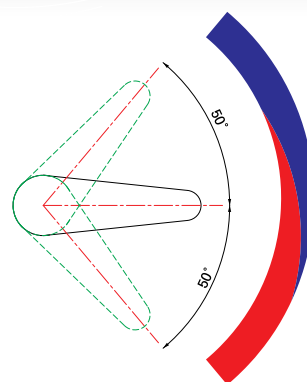
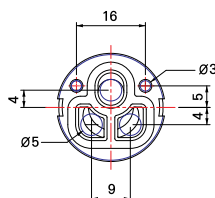
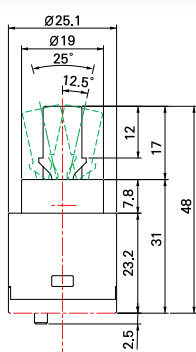
Opening Angle	Max. 25°
Mixing Angle	90° or 100°
Nut Torque	10~11 Nm
Water Resistance Pressure	Max. 35bar
Working Torque	Max. 0.5kgf·cm
Temperature	Max. 90 °C
Noise Level	Max. 15~18 db
Flow Rate (at 3bar)	23~25 ℓ/min
Life Cycle Test	500,000 cycles



25SR - 01



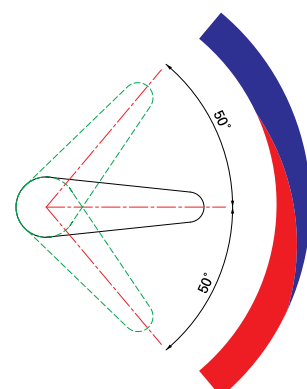
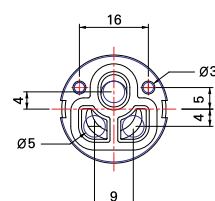
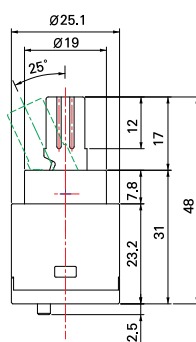
Opening Angle	Max. 25°
Mixing Angle	100°
Nut Torque	10~11 Nm
Water Resistance Pressure	Max. 35bar
Working Torque	Max. 0.5kgf·cm
Temperature	Max. 90 °C
Noise Level	Max. 15~18 db
Flow Rate (at 3bar)	16~18 ℓ/min
Life Cycle Test	500,000 cycles



25SR - 02



Opening Angle	Max. 25°
Mixing Angle	100°
Nut Torque	10~11 Nm
Water Resistance Pressure	Max. 35bar
Working Torque	Max. 0.5kgf·cm
Temperature	Max. 90 °C
Noise Level	Max. 15~18 db
Flow Rate (at 3bar)	16~18 ℓ/min
Life Cycle Test	500,000 cycles

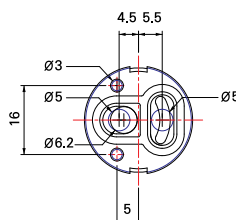
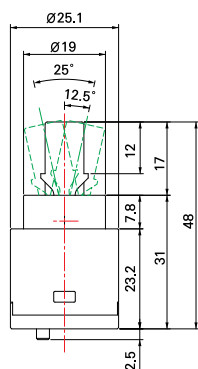


25SR - 03

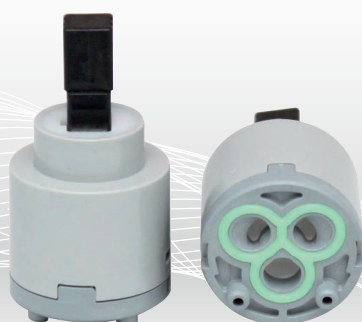


ON / OFF FUNCTION

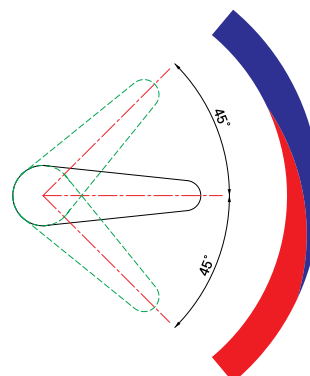
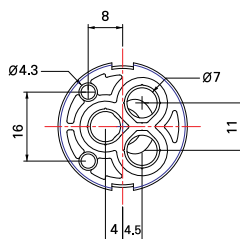
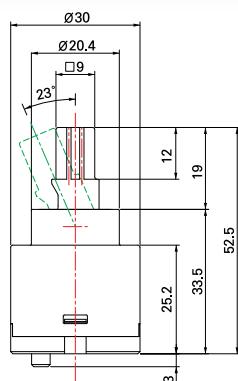
Opening Angle	Max. 25°
Mixing Angle	0°
Nut Torque	10~11 Nm
Water Resistance Pressure	Max. 35bar
Working Torque	Max. 0.5kgf·cm
Temperature	Max. 90 °C
Noise Level	Max. 15~18 db
Flow Rate (at 3bar)	16~18 ℓ/min
Life Cycle Test	500,000 cycles



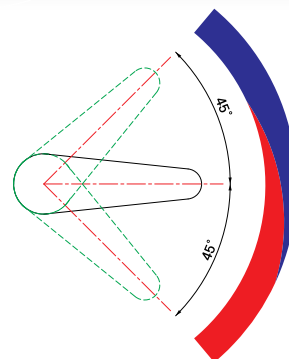
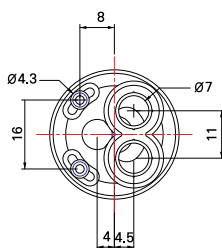
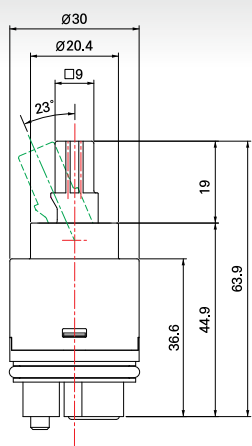
30SR



Opening Angle	Max. 23°
Mixing Angle	90°
Nut Torque	10~11 Nm
Water Resistance Pressure	Max. 35bar
Working Torque	Max. 0.5kgf·cm
Temperature	Max. 90 °C
Noise Level	Max. 15~18 db
Flow Rate (at 3bar)	20~23 ℓ/min
Life Cycle Test	500,000 cycles

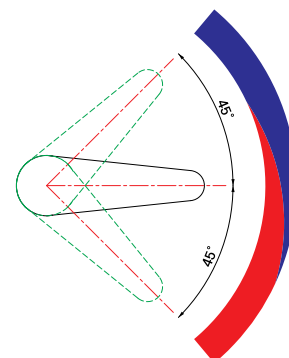
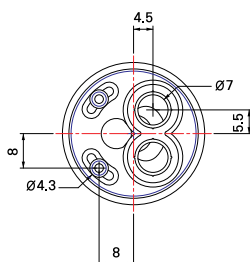
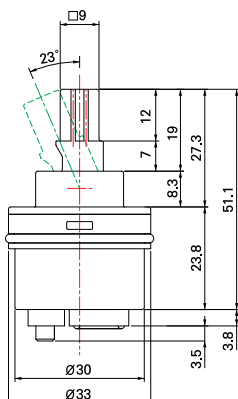
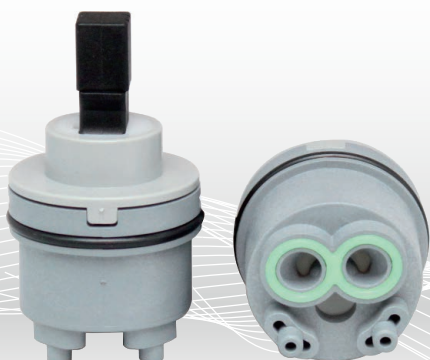


30SF



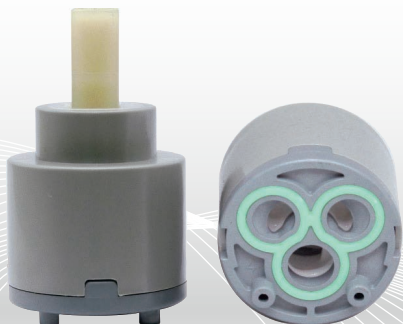
Opening Angle	Max. 23°
Mixing Angle	90°
Nut Torque	10~11 Nm
Water Resistance Pressure	Max. 35bar
Working Torque	Max. 0.5kgf·cm
Temperature	Max. 90 °C
Noise Level	Max. 15~18 db
Flow Rate (at 3bar)	20~23 ℓ/min
Life Cycle Test	500,000 cycles

33SR

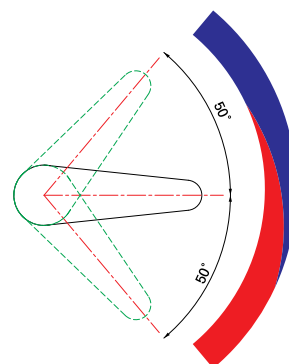
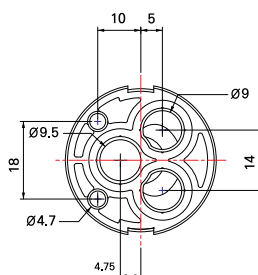
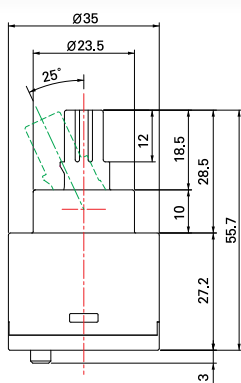


Opening Angle	Max. 23°
Mixing Angle	90°
Nut Torque	10~11 Nm
Water Resistance Pressure	Max. 35bar
Working Torque	Max. 0.5kgf·cm
Temperature	Max. 90 °C
Noise Level	Max. 15~18 db
Flow Rate (at 3bar)	20~23 ℓ/min
Life Cycle Test	500,000 cycles

35SR/LR/MR



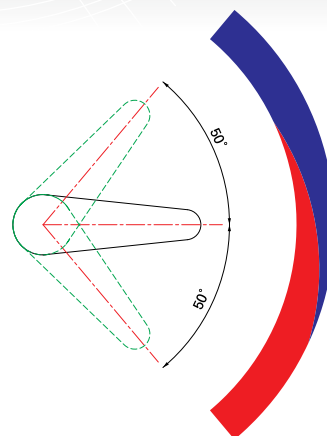
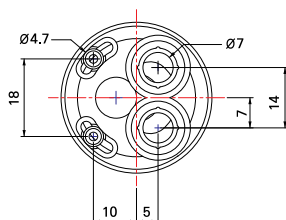
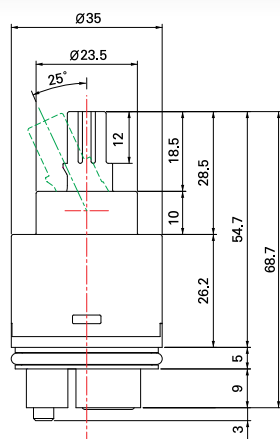
Opening Angle	Max. 25°
Mixing Angle	90° or 100°
Nut Torque	10~11 Nm
Water Resistance Pressure	Max. 35bar
Working Torque	Max. 0.5kgf·cm
Temperature	Max. 90 °C
Noise Level	Max. 15~18 db
Flow Rate (at 3bar)	23~25 ℓ/min
Life Cycle Test	500,000 cycles



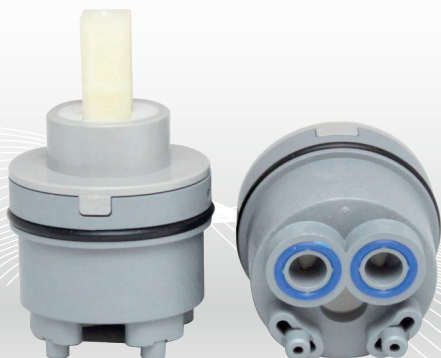
35SF/LF/MF



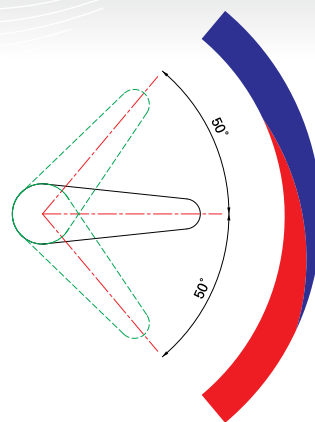
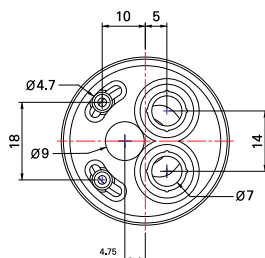
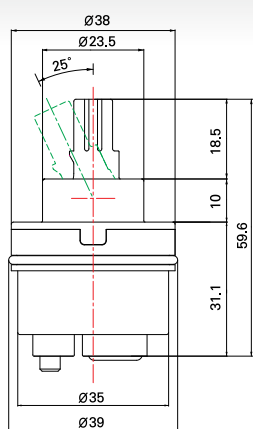
Opening Angle	Max. 25°
Mixing Angle	90° or 100°
Nut Torque	10~11 Nm
Water Resistance Pressure	Max. 35bar
Working Torque	Max. 0.5kgf·cm
Temperature	Max. 90 °C
Noise Level	Max. 15~18 db
Flow Rate (at 3bar)	23~25 ℓ/min
Life Cycle Test	500,000 cycles



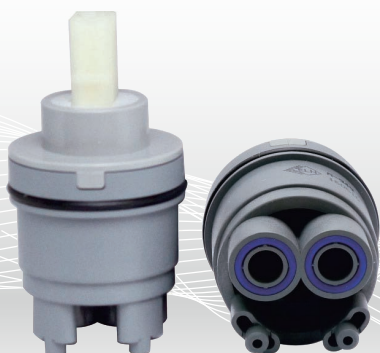
38SR/LR



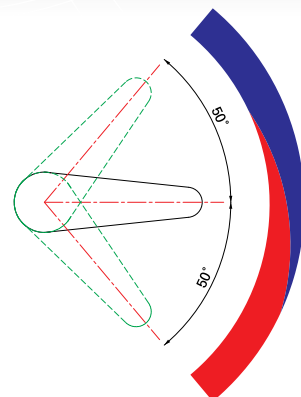
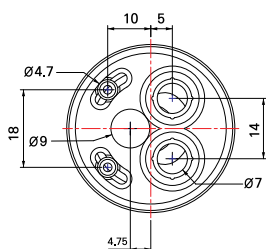
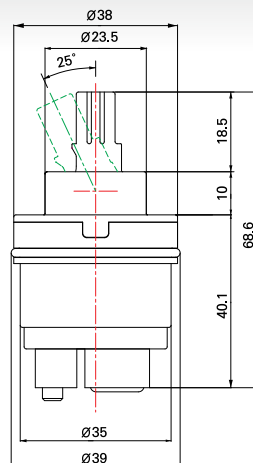
Opening Angle	Max. 25°
Mixing Angle	90° or 100°
Nut Torque	10~11 Nm
Water Resistance Pressure	Max. 35bar
Working Torque	Max. 0.5kgf·cm
Temperature	Max. 90 °C
Noise Level	Max. 15~18 db
Flow Rate (at 3bar)	23~25 ℓ/min
Life Cycle Test	500,000 cycles



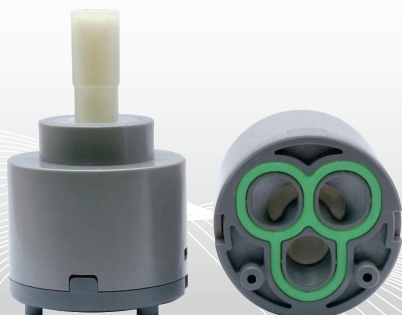
38SF/LF



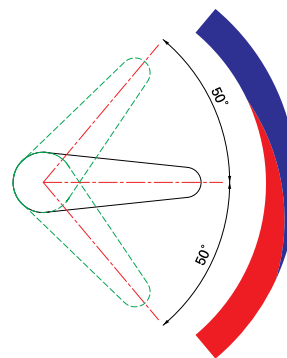
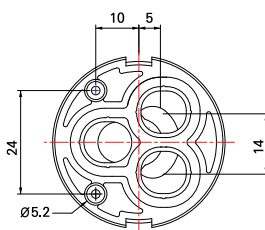
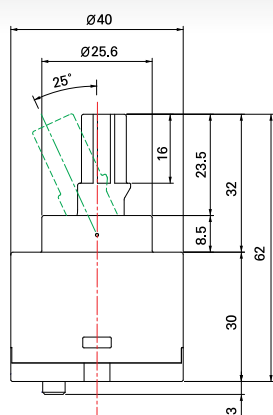
Opening Angle	Max. 25°
Mixing Angle	90° or 100°
Nut Torque	10~11 Nm
Water Resistance Pressure	Max. 35bar
Working Torque	Max. 0.5kgf·cm
Temperature	Max. 90 °C
Noise Level	Max. 15~18 db
Flow Rate (at 3bar)	23~25 ℓ/min
Life Cycle Test	500,000 cycles



40SR/LR/MR



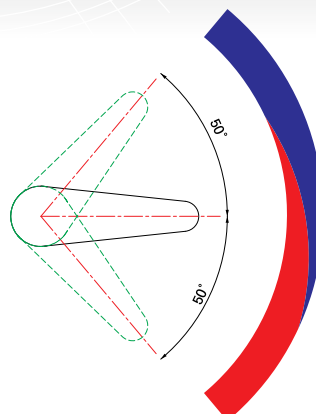
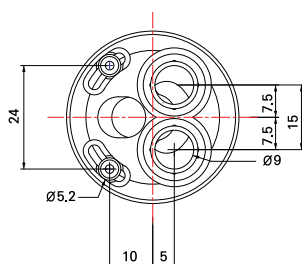
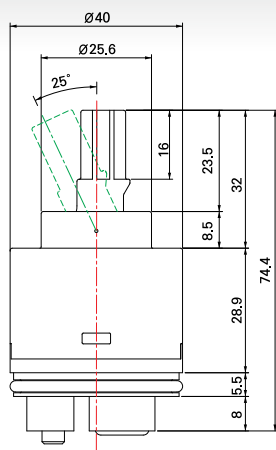
Opening Angle	Max. 25°
Mixing Angle	90° or 100°
Nut Torque	10~11 Nm
Water Resistance Pressure	Max. 35bar
Working Torque	Max. 0.5kgf·cm
Temperature	Max. 90 °C
Noise Level	Max. 15~18 db
Flow Rate (at 3bar)	23~25 ℓ/min
Life Cycle Test	500,000 cycles



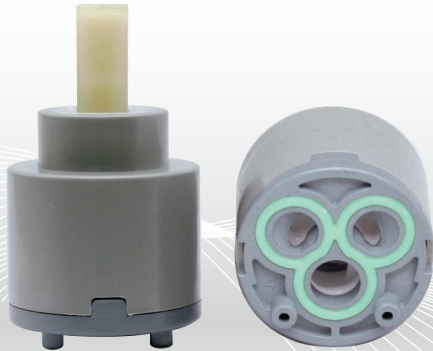
40SF/LF/MF



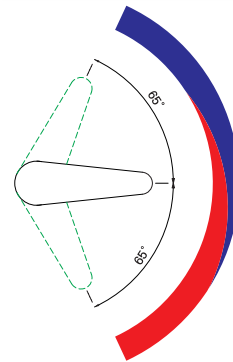
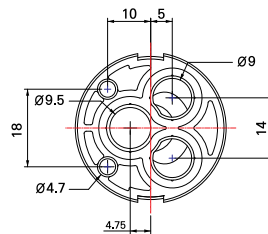
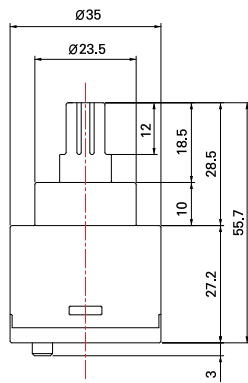
Opening Angle	Max. 25°
Mixing Angle	90° or 100°
Nut Torque	10~11 Nm
Water Resistance Pressure	Max. 35bar
Working Torque	Max. 0.5kgf·cm
Temperature	Max. 90 °C
Noise Level	Max. 15~18 db
Flow Rate (at 3bar)	23~25 ℓ/min
Life Cycle Test	500,000 cycles



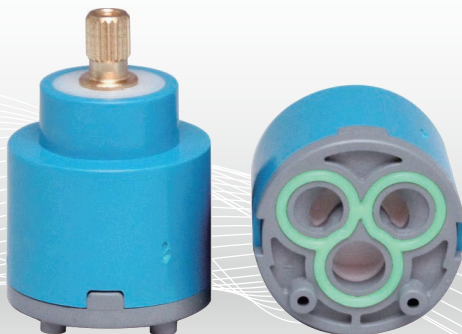
35TR



Mixing Angle	130°
Nut Torque	10~11 Nm
Water Resistance Pressure	Max. 35bar
Working Torque	Max. 0.5kgf.cm
Temperature	Max. 90 °C
Noise Level	Max. 15~18 db
Flow Rate (at 3bar)	23~25 ℓ/min
Life Cycle Test	500,000 cycles

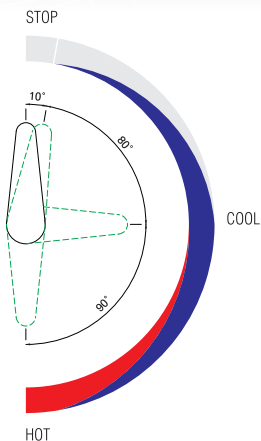
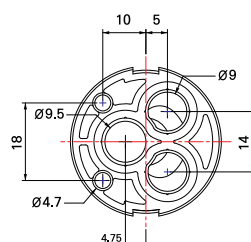
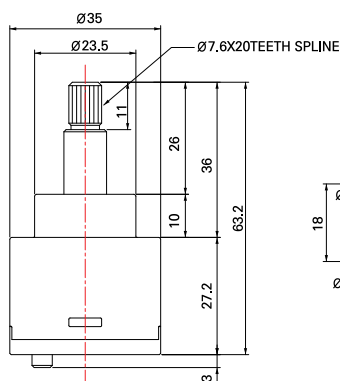


35VR



WATER FLOW STOP FUNCTION

Mixing Angle	Max. 170°
Nut Torque	9~10 Nm
Water Resistance Pressure	Max. 35bar
Working Torque	Max. 0.5kgf.cm
Temperature	Max. 90 °C
Noise Level	Max. 15~18 db
Flow Rate (at 3bar)	23~25 ℓ/min
Life Cycle Test	500,000 cycles



TECHNICAL DATA

MATERIAL

No	Cartridge Component	Material
1	Case	Noryl (PPO) / PC
2	Lever	Nylon (PA6+GF)
3	Pin	SUS / BS
4	Slider & Disc Cover	Acetal (POM)
5	Ceramic Disc	Al ₂ O ₃ 96%
6	Seat	Noryl (PPO+GF)
7	Seat Packing	Silicon or NBR

NOISE LEVEL

Condition : With Noise Reducer, Aerator, 35mm

Hot/Cold Water Pressure : 3bar

(Unit : db)

	Cold	Mixed	Hot
Noise	15	14.5	14.7

CERAMIC DISC DATA

Density	$3.65 \leq d \leq 3.7$
Flatness	$F \leq 0.6 \mu\text{m}$
Roughness	$0.1 \leq Ra \leq 0.3$
SBA	$50\% \leq SBA \leq 80\%$

LIFE CYCLE TEST : 500,000 Cycles (Lot sampling)

Nut Tightening Torque : 11 Nm (110kgf.cm)

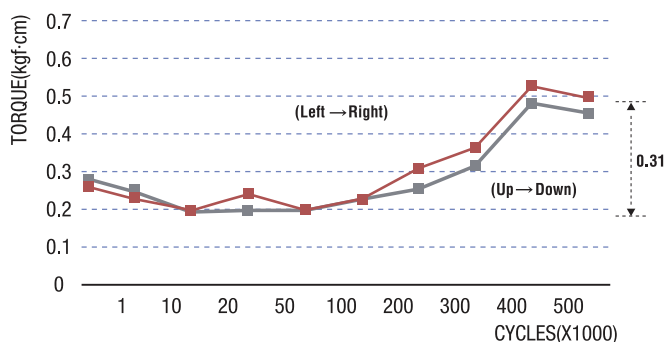
Water Pressure : 1.5kgf / cm²

Water Temp : 20 ~ 25 °C

Cycle : X1000

Operating Step (One Cycle)

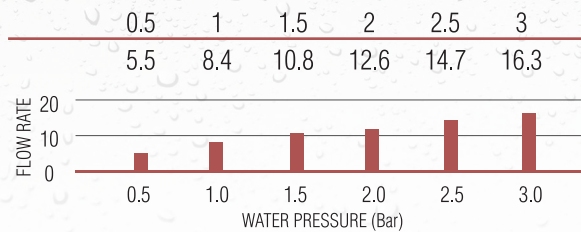
- Step 1 : Mixing Water ON → OFF
- Step 2 : Cold Water ON
- Step 3 : Cold → Hot → Cold
- Step 4 : Cold Water OFF
- Step 5 : Hot Water On → OFF



FLOW RATE

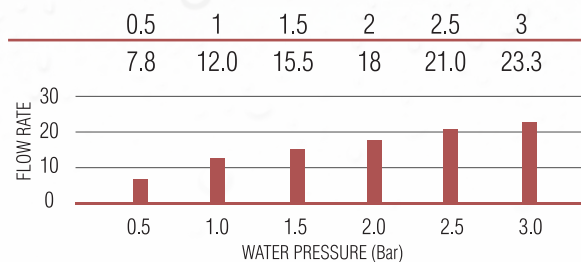
Ø25

(Unit : Bar, l/min)



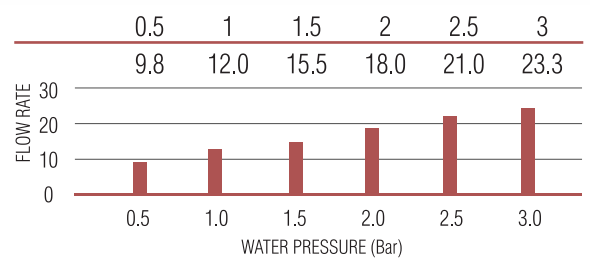
Ø29

(Unit : Bar, l/min)



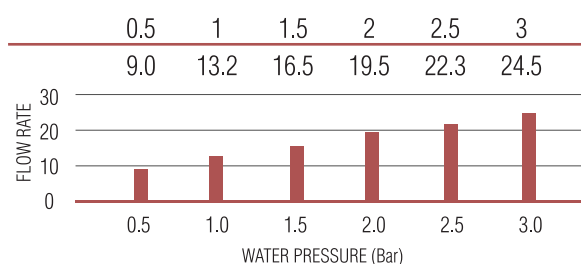
Ø30, Ø33

(Unit : Bar, l/min)



Ø35, Ø38, Ø40

(Unit : Bar, l/min)



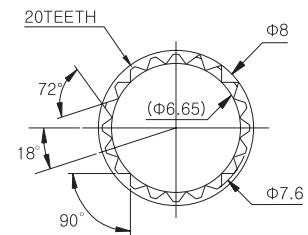
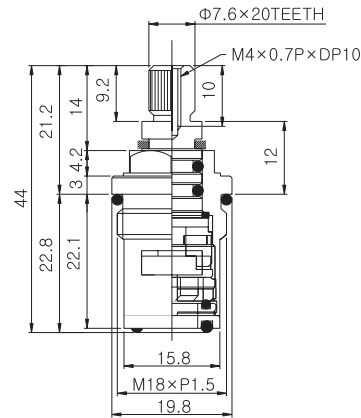
WATER SAVING FUNCTION (OPTION)

Step	1	2	3
2-Step Function	40%	100%	-
3-Step Function	15%	60%	100%

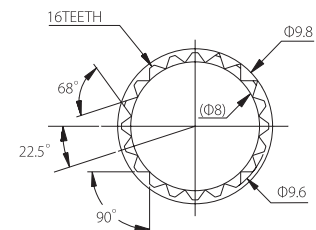
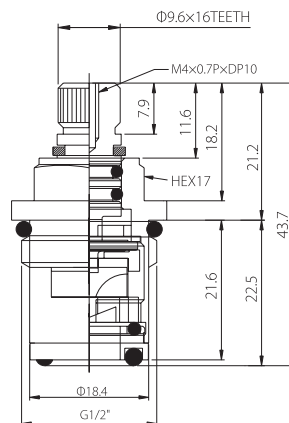


HEADWORK

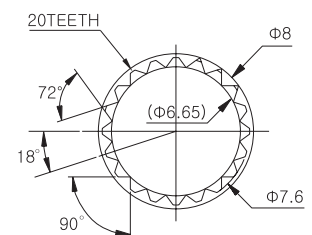
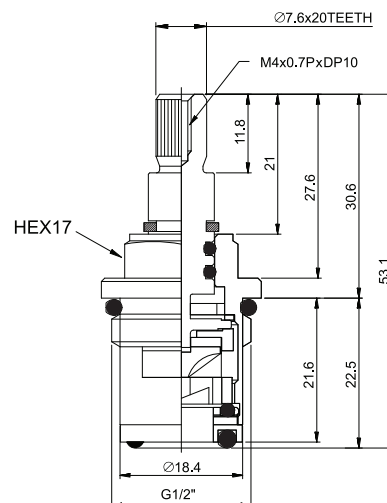
B1100



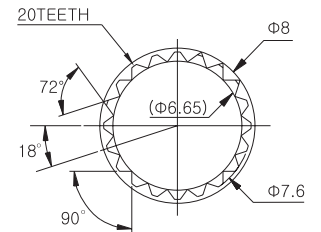
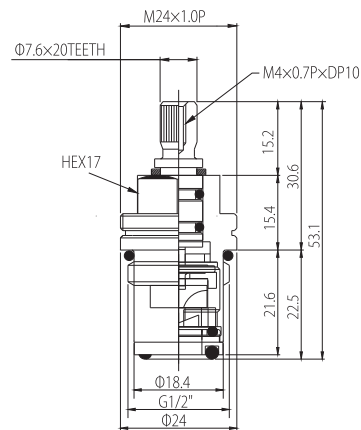
B2100



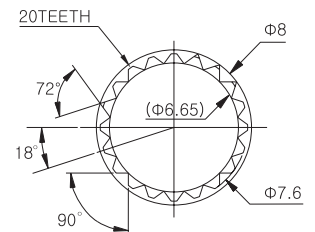
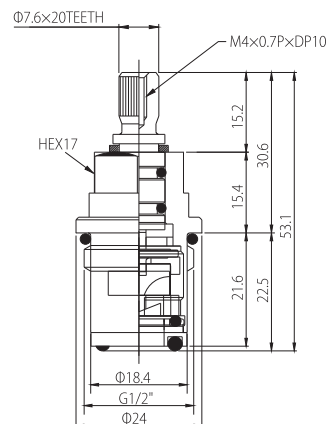
B2106



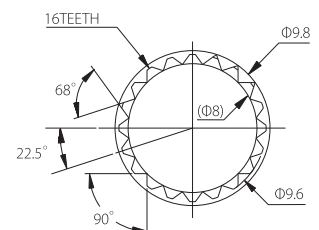
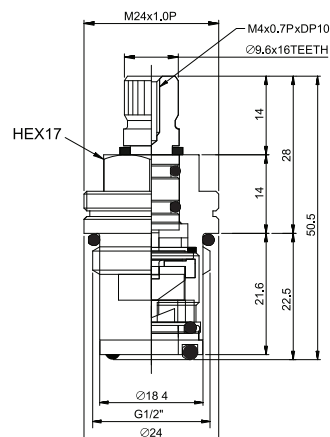
B2120



B2130

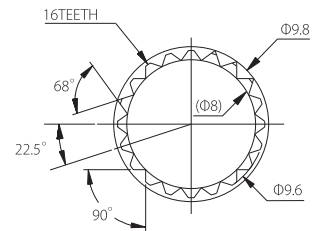
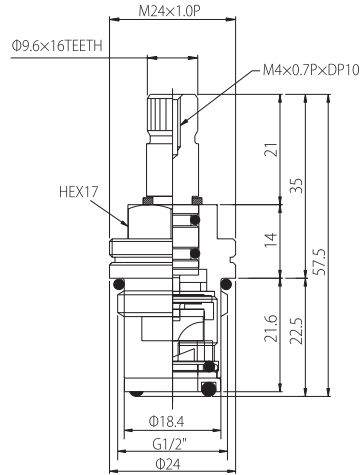


B2140

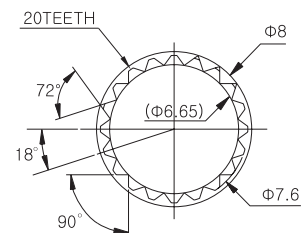
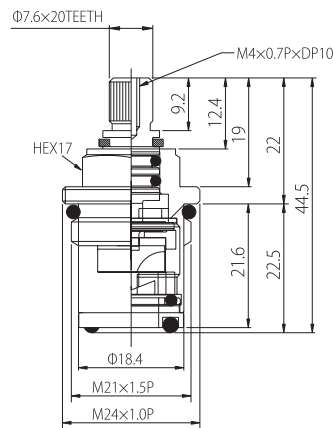


B

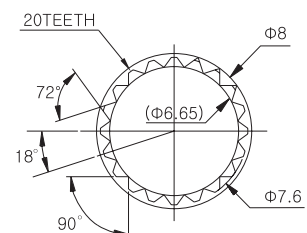
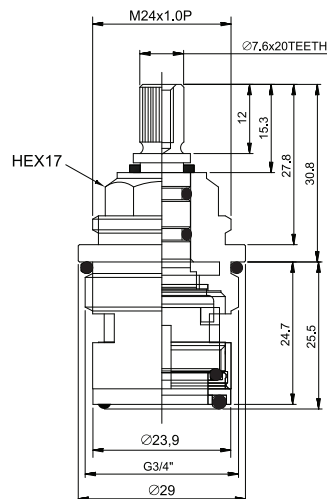
B2141



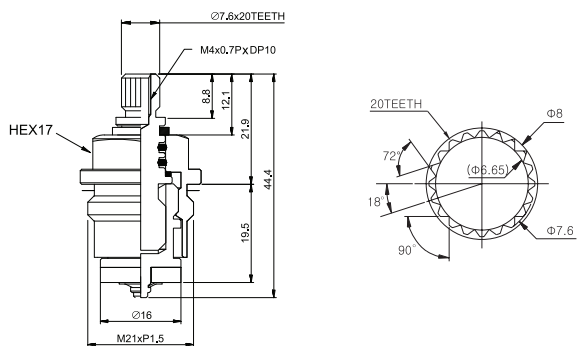
B9100



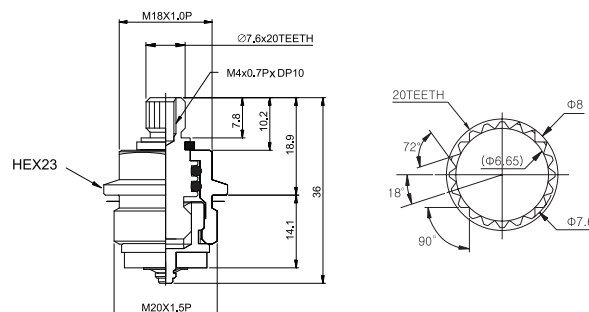
B3100



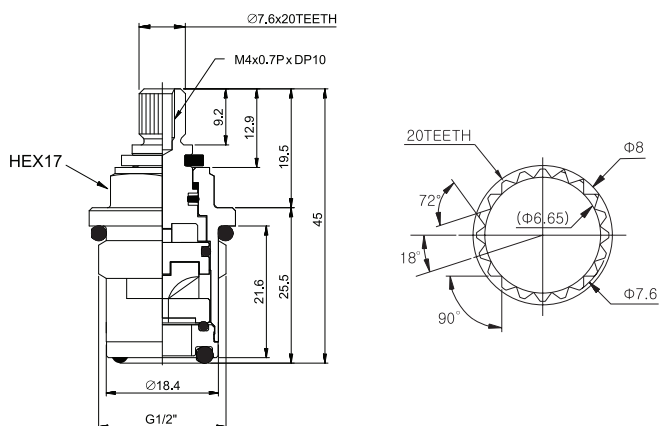
N2412



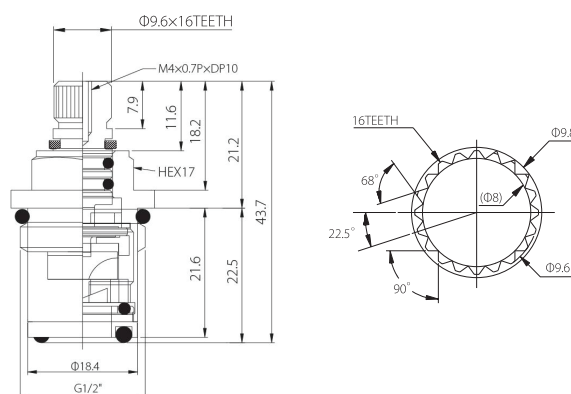
N2421



P2200

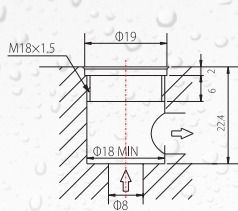


P2211

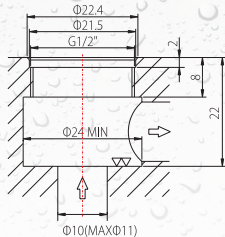


TECHNICAL DATA

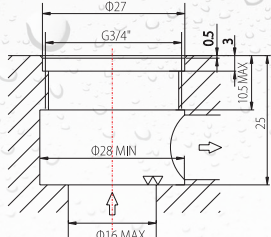
BODY SPECIFCATION



(B1000 SERIES)



(B2000 SERIES)



(B3000 SERIES)

OPENING TYPE

- TYPE A Left → Right (Water Close)
TYPE B Right → Left (Water Close)

METERIAL

No	Description	Material
1	Spindle	BS
2	Snap Ring	PBC
3	O - Ring	NBR
4	Housing	BS or PPS
5	O - Ring	NBR
6	Washer	POM
7	Disc Cover	POM
8	Upper Ceramic	AL ₂ O ₃ 96%
9	Lower Ceramic	AL ₂ O ₃ 96%
10	O - Ring	Silicon or NBR
11	Seat	BS or PPS
12	O - Ring	Silicon or NBR

TECHNICAL DATA

Opening Angle	45° or 90° or 180°
Nut Torque	10~11 Nm
Water Resistance Pressure	Max. 35bar
Working Torque	Max. 0.5kgf-cm
MAX. Temperature	Max. 90 °C
MAX. Noise Level	Max. 17~19 db
Flow Rate (AT 3bar)	37~52 ℓ/min
Life Cycle	500,000 cycles

CERAMIC DISC DATA

Density	3.65 ≤ d ≤ 3.7
Flatness	F ≤ 0.6 μm
Roughness	0.1 ≤ Ra ≤ 0.3
SBA	50% ≤ SBA ≤ 80%

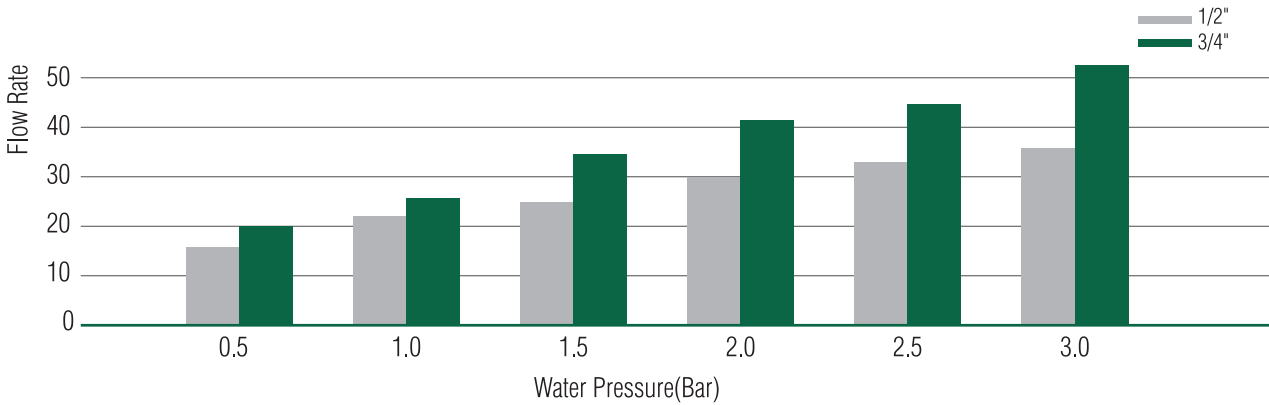
NOISE LEVEL

Water Pressure : 3 Bar

FLOW RATE

	(Unit : Bar, ℓ/min)					
	0.5	1	1.5	2	2.5	3
1/2"	16.4	21.8	26.3	30.0	33.4	36.6
3/4"	20.0	27.1	35.0	41.3	45.0	51.6

	(Unit : db)	
	G 1/2"	G 3/4"
Noise	18.0	20.0



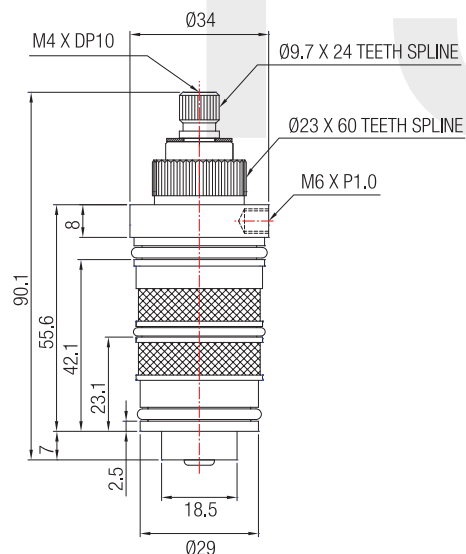
KORTEC

THERMOSTATIC
CARTRIDGE
PAGE 36-38

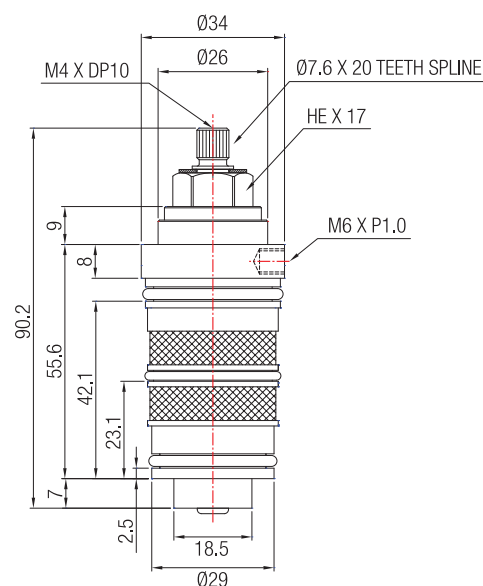


THERMOSTATIC CARTRIDGE

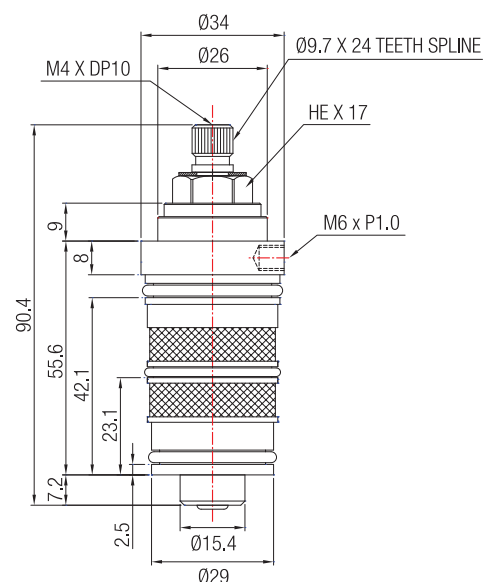
TS1010



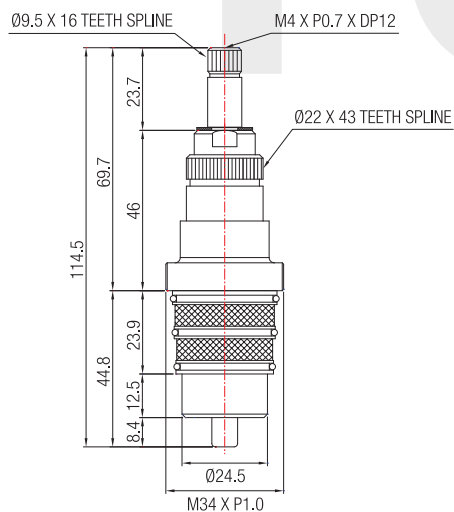
TS1011



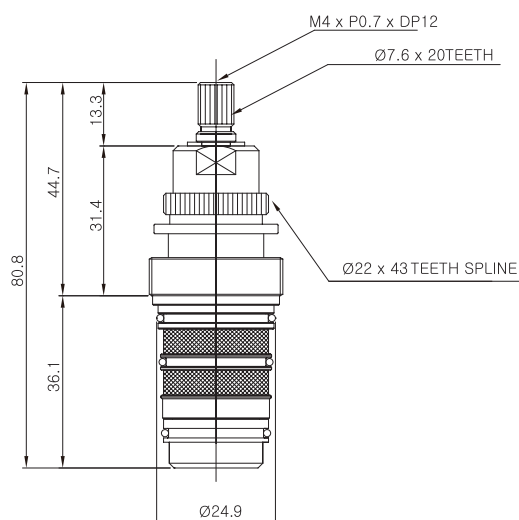
TS1013



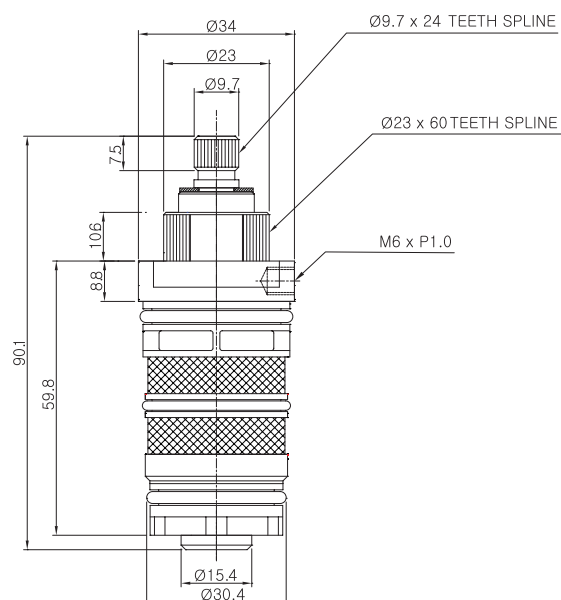
TS1040



TS1052



TS2010



TECHNICAL DATA

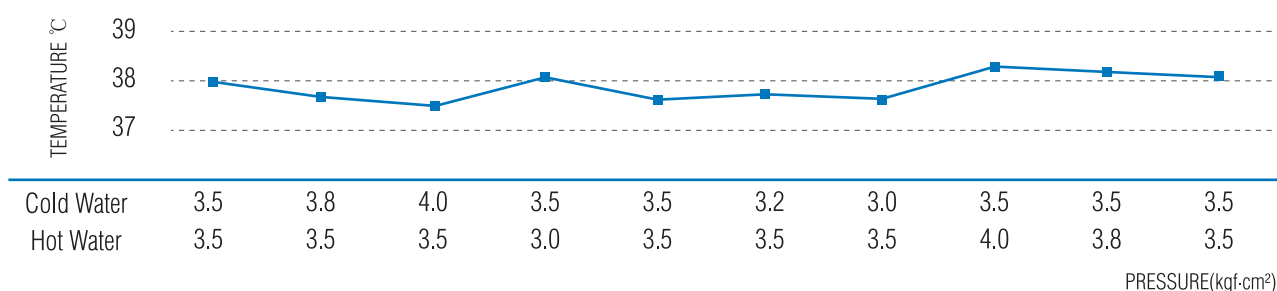
HANDLE



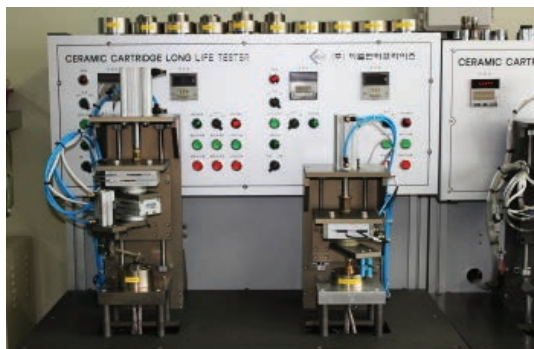
TECHNICAL DATA

Turning Angle	330°
Temperature Range	10~60℃
Temperature Stop	38℃ or 40℃
Inlet Water Supply Temperature	Hot Water 70℃ , Cold Water 15~25℃
Outlet Water Temperature Adjusted On 38℃	38℃ ± 1.5℃
Outlet Flow Rate Adjusted On 38℃	30 ℓ/min at 3bar
Operating Pressure	0.5~6kgf·cm²(0.05~0.6Mpa)
Recommend Pressure	1~5kgf·cm²(0.1~0.5Mpa)
Life Cycle	100,000 cycles

TEMPERATURE VARIATION TEST



TESTING MACHINE



Life Cycle Testing M/C



Life Cycle Testing M/C



Air Leakage Inspection M/C



Thermostat Lite Cycle Testing M/C



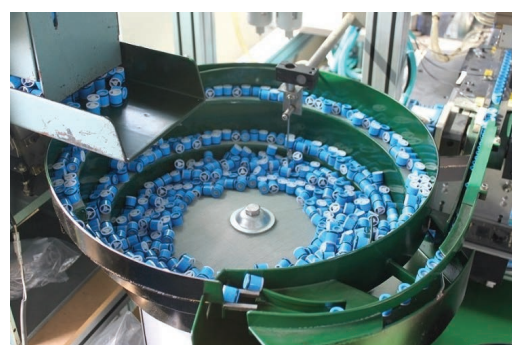
Thermostat Temperature Inspection M/C



Check Valve Leakage Inspection M/C



SMA Spring Inspection M/C



Check Valve Leakage Inspection M/C

KORTEC



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