

TECHNICAL CHARACTERISTICS OF THE CERAMIC DISCS:

Material:	AL₂O₃
Surface roughness Ra:	0.2 μm
Contact surface area:	50-80%

TECHNICAL CHARACTERISTICS OF THE CARTRIDGE:

Opening angle:	25°
Mixing angle:	90°
Max temperature:	90°C / 194°F

Recommended tightening torque:

12-13 Nm / 106-115 lbf·in

Pressure test:

Pneumatic:	6 bar / 87 psi
Hydraulic:	35 bar / 500 psi

Flow rate:

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

21 l/min / 5.5 gpm with resistance „C”

32 l/min / 8.5 gpm without resistance

Endurance test:

EN 817	70 000 cycles
ASME A 112.18.1M	500 000 cycles

Two exclusive features to provide economies of water consumption overall, and of hot water use specifically:

- Saves energy by turning on in middle position of lever handle, delivering cold water - adds hot water only as lever is rotated. To obtain high temperature user must override rotational “resistance bump”.
- Saves water because user must override pivoting “resistance bump” to obtain high flow – acts as deterrent to unconsciously turning handle on to full flow position regardless of water requirement.

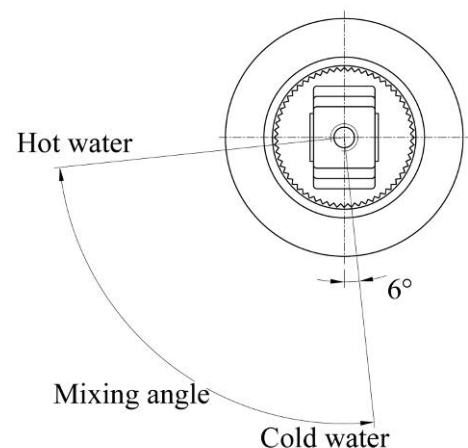
Economical flow rate:

max. 9l/min / 2.4gpm at 3bar / 45psi

Economical water temperature:

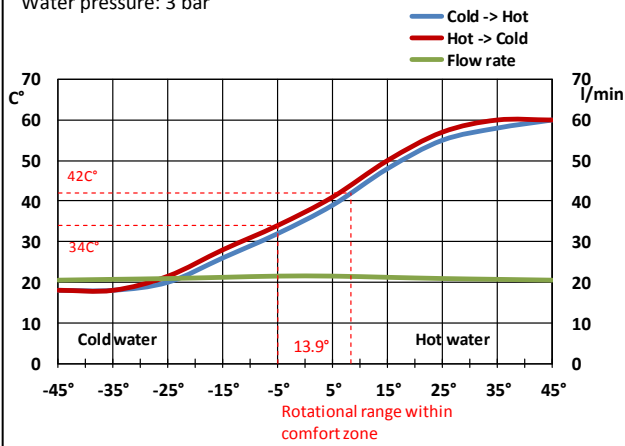
~38 °C / 100 °F

THE MOVEMENT RANGE OF THE LEVER

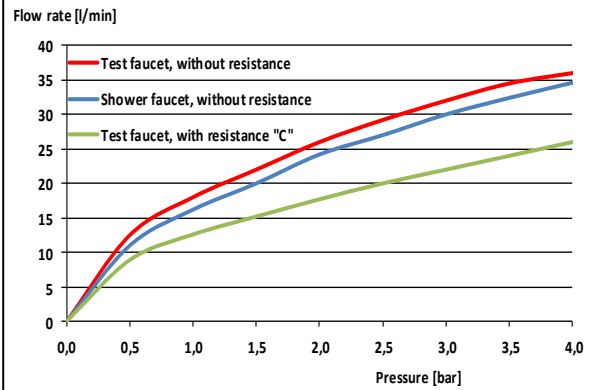


FLOW RATE & HYSTERESIS CURVES

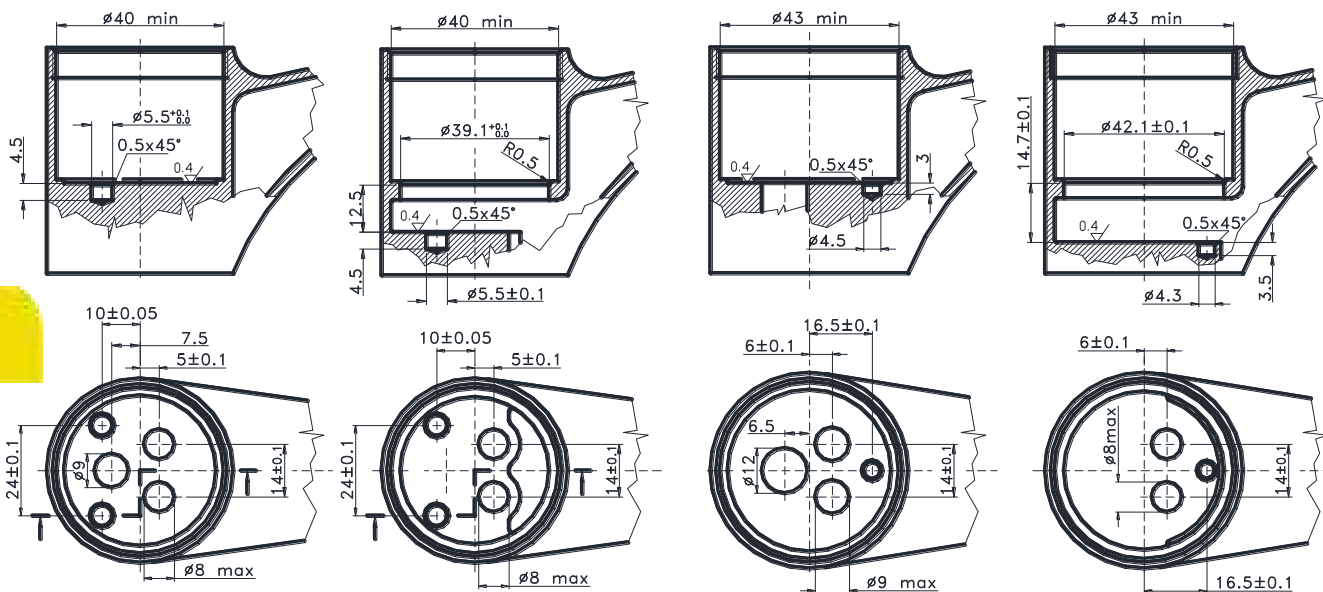
Test faucet, resistance „C”
Water pressure: 3 bar



FLOW RATE CURVES



INTERCHANGEABLE WITH 40/42 MM CONVENTIONAL SINGLE-LEVER CARTRIDGES.



Faucets

BK - 40P A

BK - 40P B

BK - 42P C

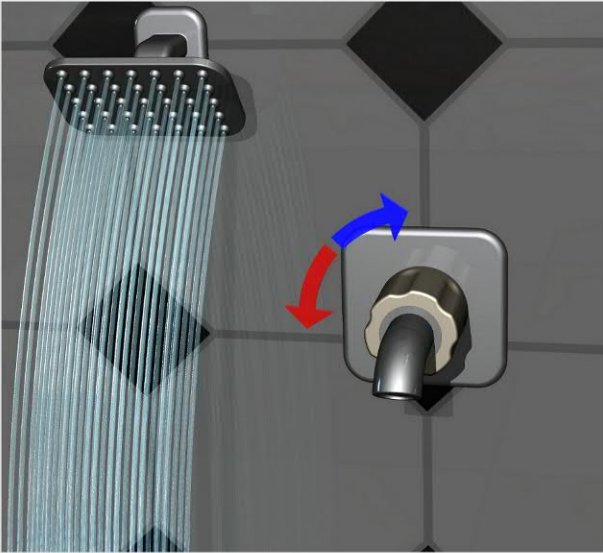
BK - 42P D

KEROX

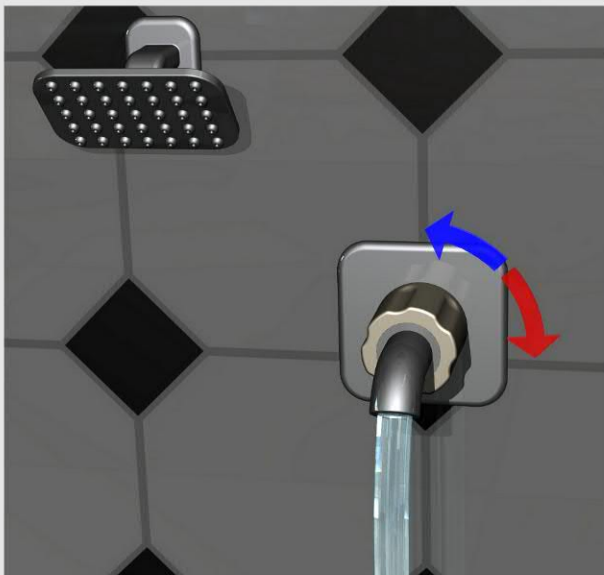
NEW

Ceramic Bath & Shower
Diverter Cartridge
Rotary Flow- Thru Type
Model BSDF-40

Shower mode



Shut-off position is the
center position



Bath filling mode

ADVANTAGES

- It simplifies the design of the shower valve
- No separate diverter mechanism
- Cost reduction in faucet production
- It provides easier, more intuitive operation
- Easier cleaning



TECHNICAL CHARACTERISTICS OF THE CERAMIC DISCS:

Material:	AL₂O₃
Surface roughness Ra:	0.3 μm
Contact surface area:	50-70%

TECHNICAL CHARACTERISTICS OF THE CARTRIDGE:

Mixing angle in bath position (clockwise):	90°
Mixing angle in shower position (anti-clockwise):	90°
Max. water pressure:	35 bar / 500 psi
Max. temperature:	90°C / 194°F
Max. tightening torque:	12 Nm / 106 lbf•in

Pressure test:

Pneumatic:	6 bar / 87 psi
Hydraulic:	35 bar / 500 psi

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

28 l/min / 7.4 gpm

in bath position without resistance

12.6 l/min / 4 gpm

in shower position without resistance

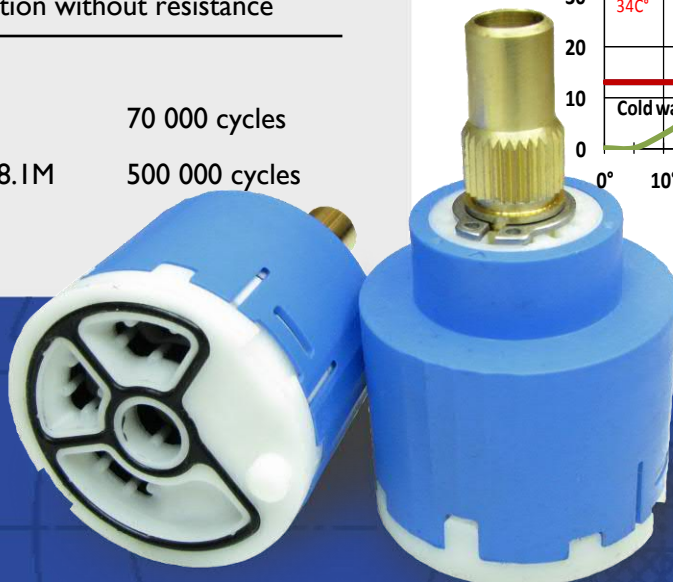
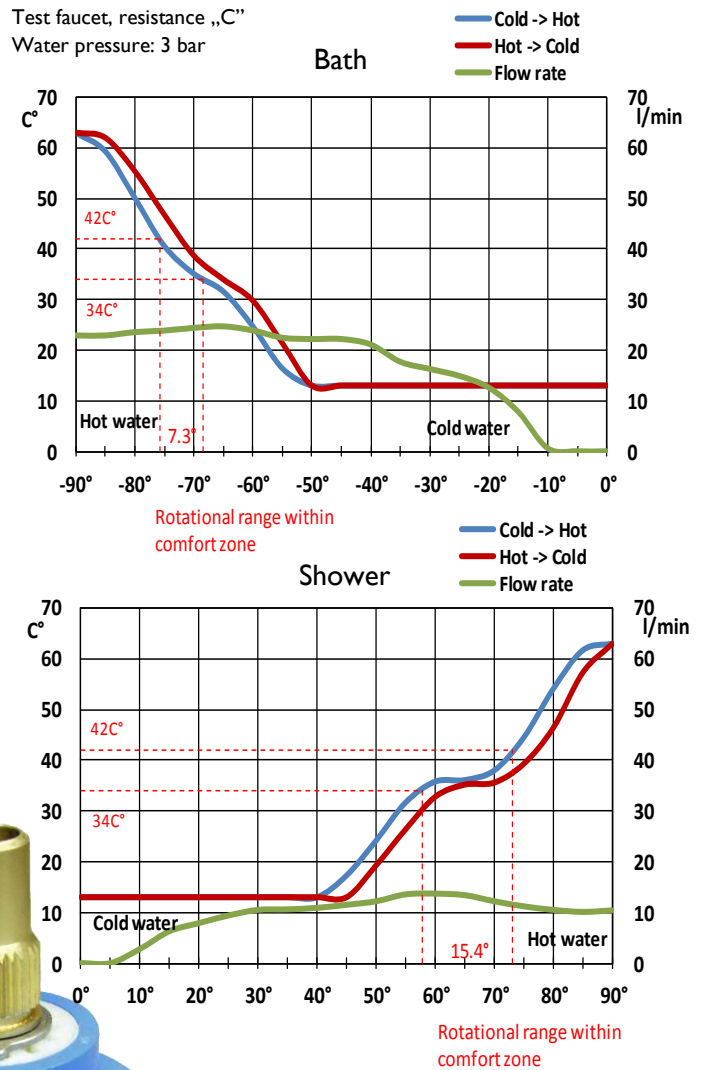
Endurance test:

EN 817	70 000 cycles
ASME A 112.18.1M	500 000 cycles

- Rotational action provides on-off and temperature control in two selectable outputs. (no volume control)
- Mixed water flows thru either the cartridge stem towards the bath or through the bottom outlet to the shower.
- ±90° travel from off to full hot in both operating ranges.

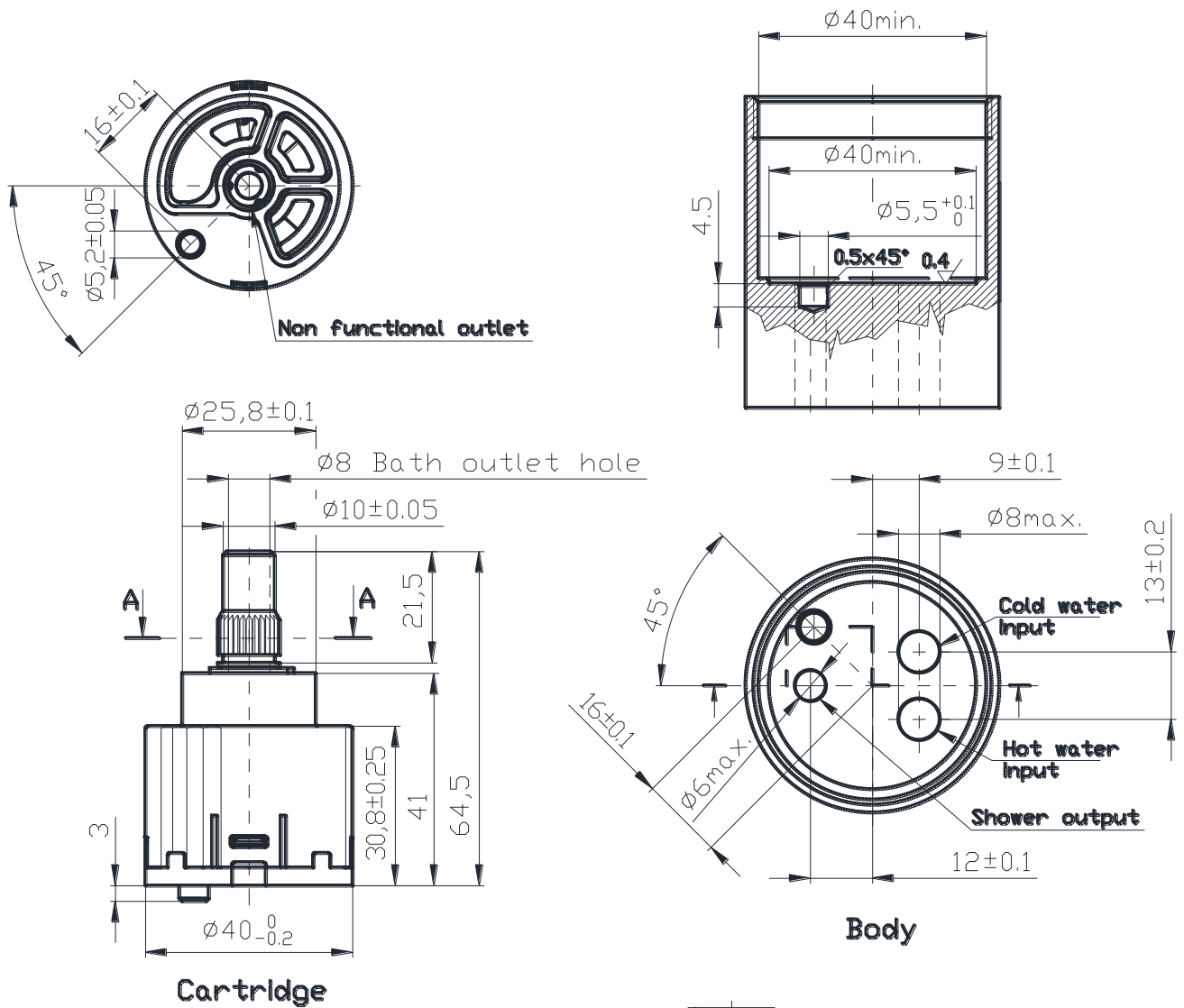
FLOW RATE & HYSTERESIS CURVES

Test faucet, resistance „C”
Water pressure: 3 bar



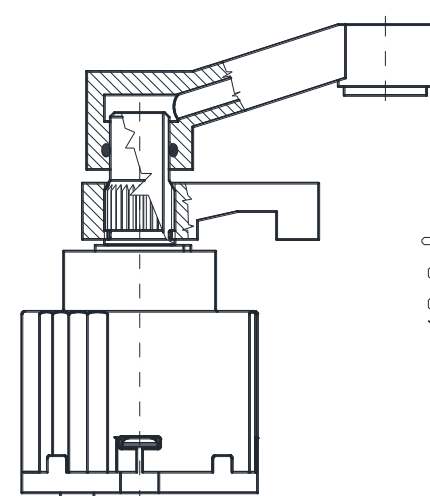
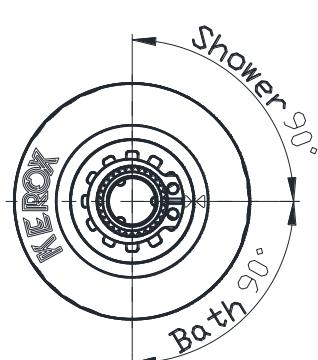
BSDF-40

CARTRIDGE

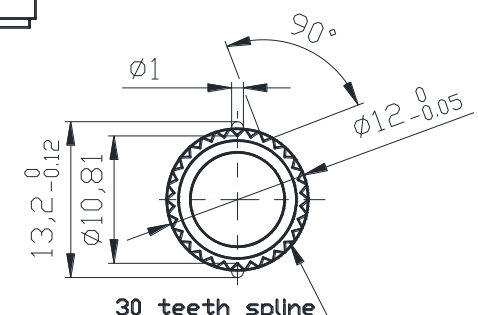


Cartridge

Body



Example for installation



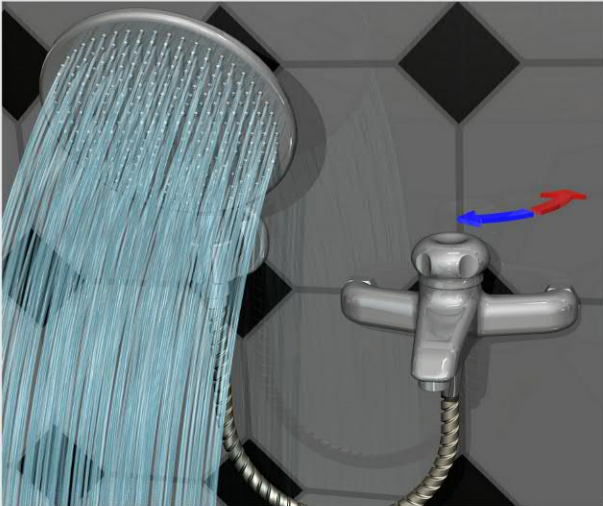
A-A
M 2:1
Different stem specification is also available.

KEROX

Ceramic Bath & Shower
Diverter Cartridge
Rotary Type
Model BSDR-40

NEW

Shower mode



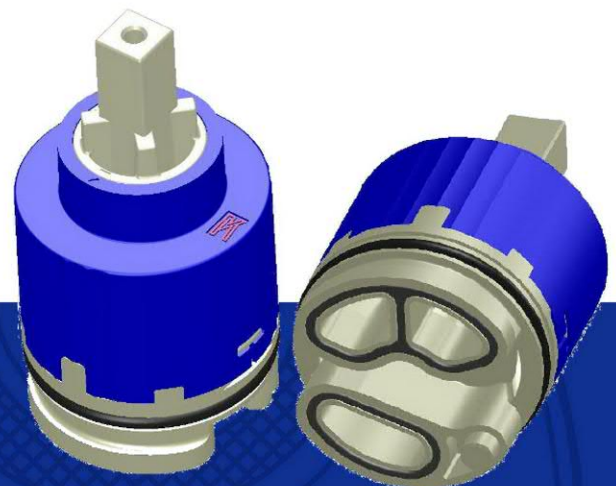
Shut-off position is the
center position



Bath filling mode

ADVANTAGES

- It simplifies the design of the shower valve
- No separate diverter mechanism
- Cost reduction in faucet production
- It provides easier, more intuitive operation
- Easier cleaning



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Material:	AL ₂ O ₃
Surface roughness Ra:	0.3 μm
Contact surface area:	50-70%

TECHNICAL CHARACTERISTICS OF THE CARTRIDGE:

Mixing angle in bath position (clockwise):	90°
Mixing angle in shower position (anti-clockwise):	90°
Max. water pressure:	35 bar / 500 psi
Max. temperature:	90°C / 194°F
Max. tightening torque:	12 Nm / 106 lbf•in

Pressure test:

Pneumatic:	6 bar / 87 psi
Hydraulic:	35 bar / 500 psi

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

24.8 l/min / 6.6 gpm

in bath position without resistance

13.1 l/min / 3.5 gpm

in shower position without resistance

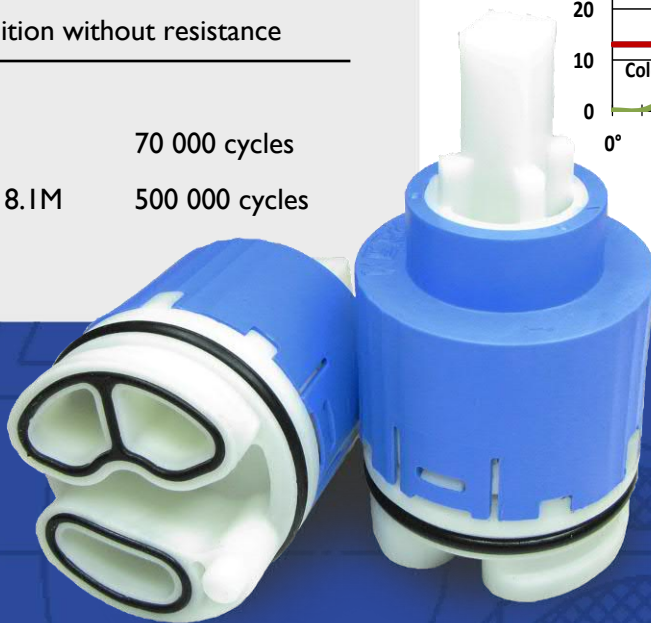
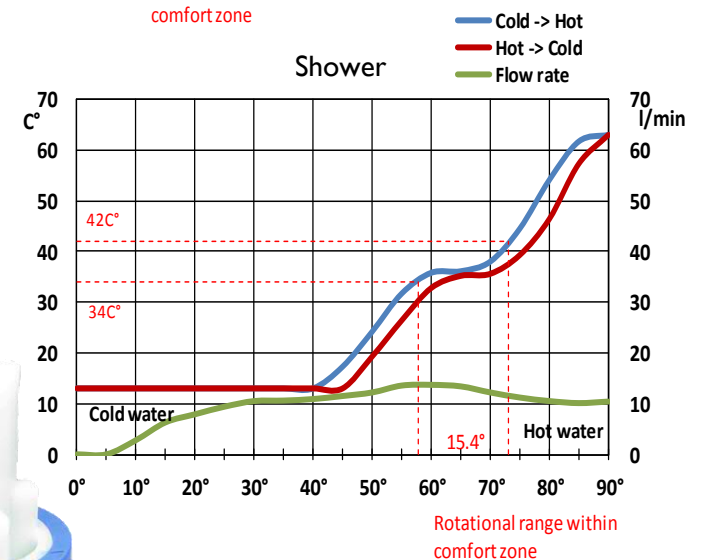
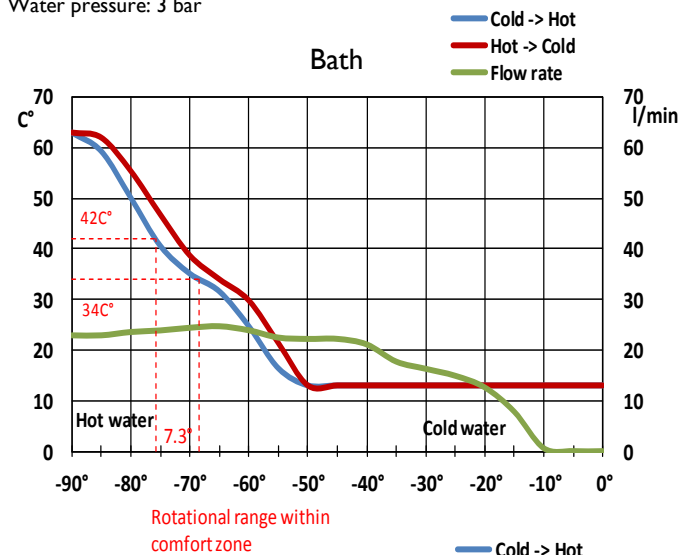
Endurance test:

EN 817	70 000 cycles
ASME A 112.18.1M	500 000 cycles

- Rotational travel is divided into bath and shower quadrants, each providing temperature control only. (no volume control)
- ±90° travel from off to full hot in both operating ranges.

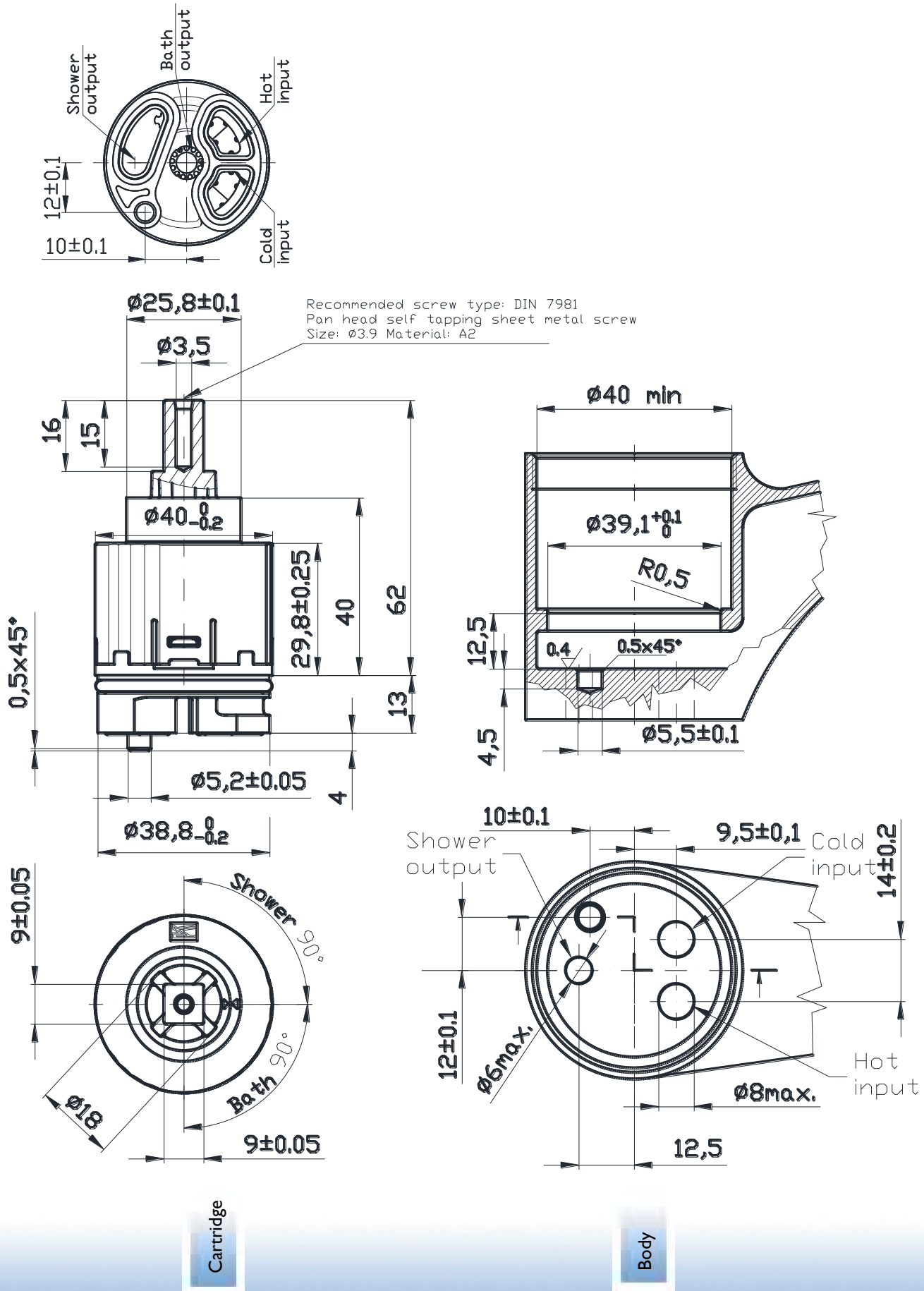
FLOW RATE & HYSTERESIS CURVES

Test faucet, resistance „C”
Water pressure: 3 bar



BSDR-40

CARTRIDGE



KEROX

NEW

Ceramic Bath & Shower
Diverter Cartridge
Single-Lever Type
Model BSD-40

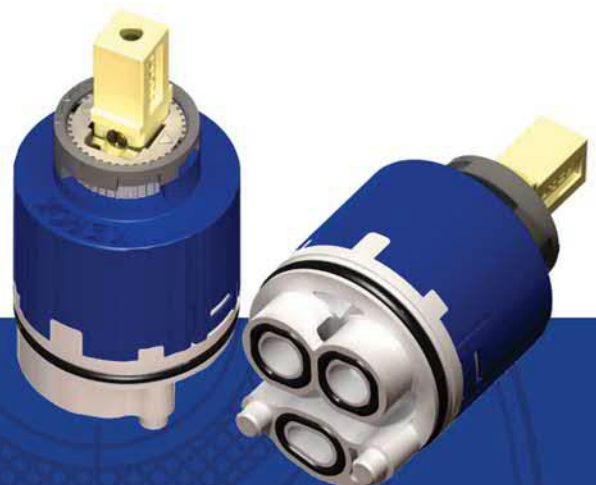
Shower mode
rotary operating



Bath filling mode
single lever operating

ADVANTAGES

- It simplifies the design of the shower valve
- No separate diverter mechanism
- Cost reduction in faucet production
- It provides easier, more intuitive operation
- Easier cleaning



TECHNICAL CHARACTERISTICS OF THE CERAMIC DISCS:

Material:	AL₂O₃
Surface roughness Ra:	0.3 μm
Contact surface area:	50-70%

TECHNICAL CHARACTERISTICS OF THE CARTRIDGE:

Opening angle (in bath position only):	25°
Mixing angle in bath position:	80°
Mixing angle in shower position:	90°
Max. water pressure:	35 bar / 500 psi
Max temperature:	90°C / 194°F
Max. tightening torque:	12Nm / 106lbf·in

Pressure test:

Pneumatic: **6 bar / 87 psi**

Hydraulic: **35 bar / 500 psi**

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

25.5 l/min / 6.7 gpm in bath position without resistance

11 l/min / 2.9 gpm in shower position without resistance

Endurance test:

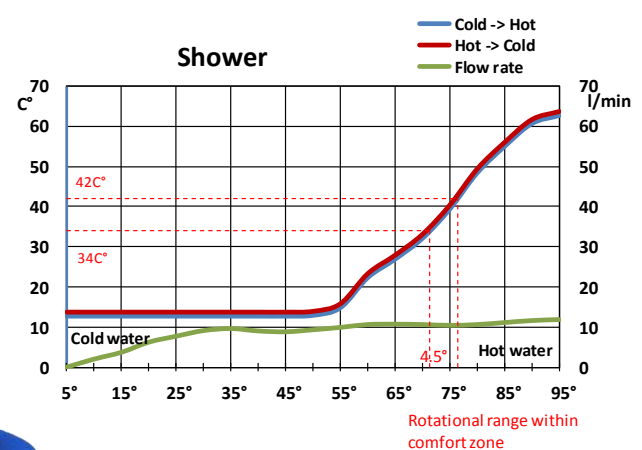
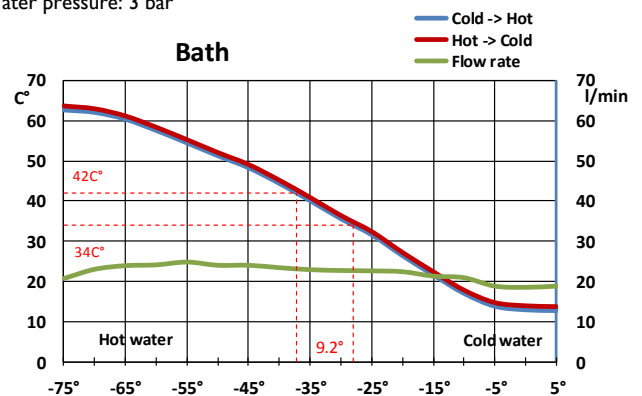
EN 817 70 000 cycles

ASME A 112.18.1 500 000 cycles

- Single-lever type cartridge with built-in shower diverter function.
- Rotational travel is divided into bath and shower quadrants: In the right quadrant (bath mode), single lever action provides both temperature and volume control. In the left quadrant (shower mode), rotational action provides temperature control only.

FLOW RATE & HYSTERESIS CURVES

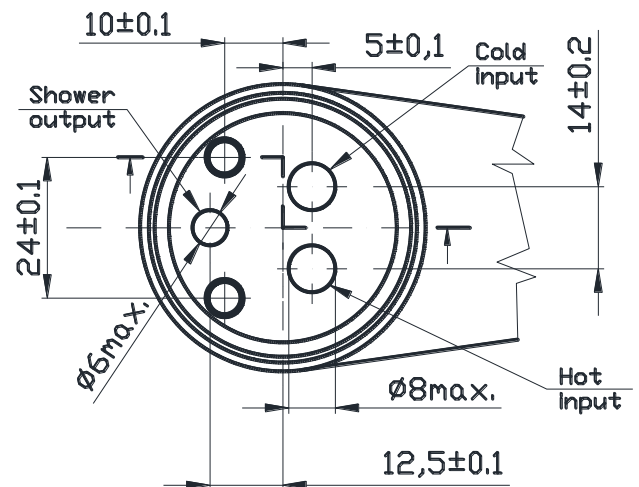
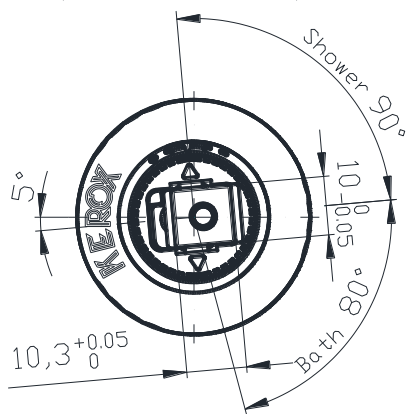
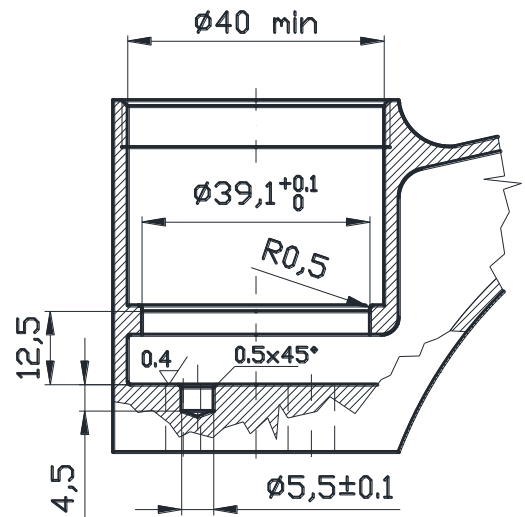
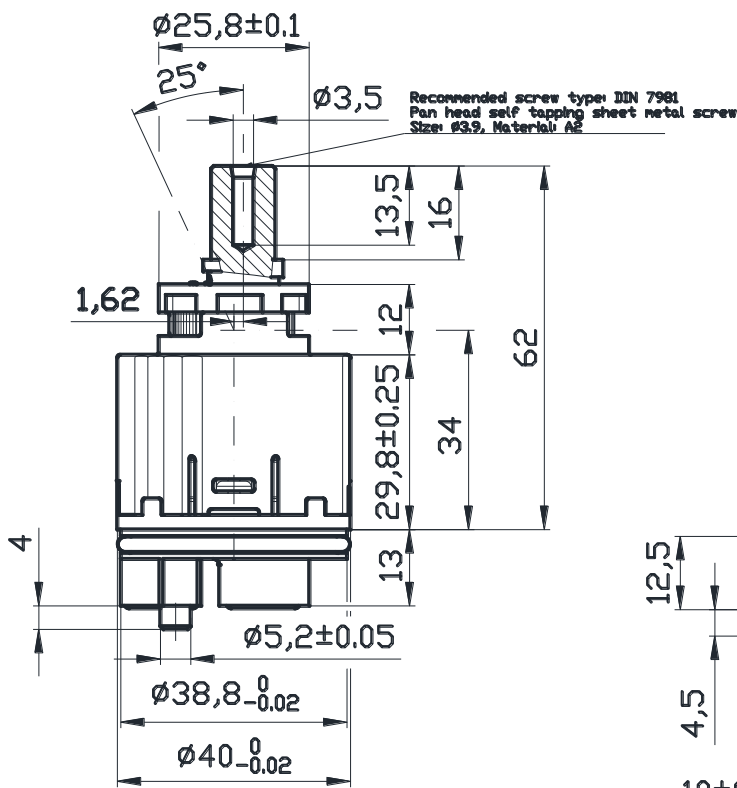
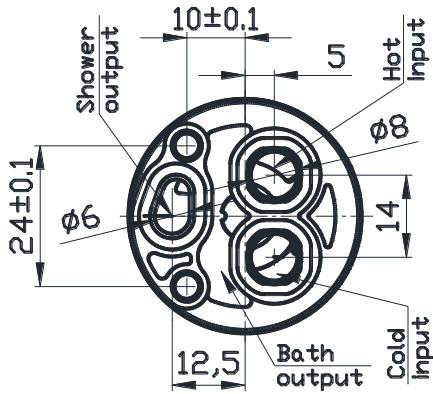
Test faucet, without resistance
Water pressure: 3 bar



BSD-40

CARTRIDGE

B



Cartridge

Faucet