KEROX

Safety Anti-Scald Valve
ASV

INSTALLATION

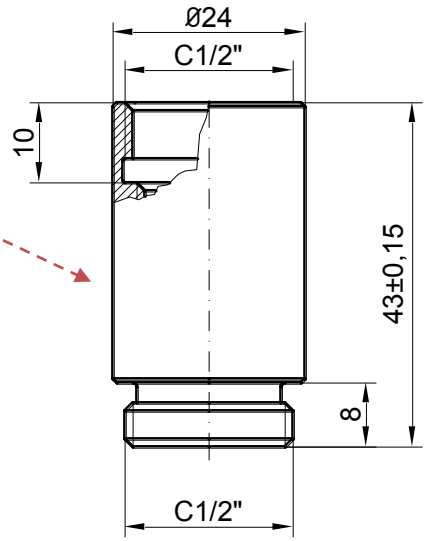
- The valve is easily installed in line between the shower outlet and showerhead or hose (standard 1/2"connections).

FEATURES

- This safety valve eliminates the danger of scalding by means of an automatic shut-down when through-put temperatures exceed 48° C±2°C (118°F±4°F).
- The heart of the device is a thermostatic wax element that expands and contracts in relation to the water temperature.
- The valve causes no flow restriction.

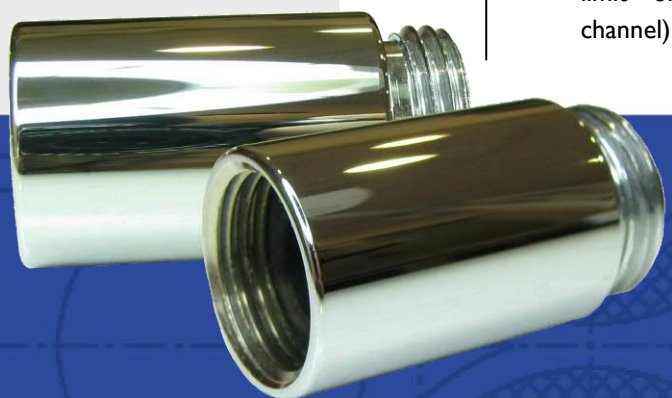
OPERATION

- Turn on cold water first, then add hot until the desired temperature is met (do not turn on hot by itself).
- Should there be a reduction in the cold water supply temperature causing a rise in output exceeding 48°C±2°C (118°F±4°F), the valve will automatically close, shutting water delivery down to a trickle.
- Once the supply temperatures are normalized (usually a few seconds), the valve will open, permitting showering to continue.
- Should the faucet or shower valve be turned off while the automatic valve is still closed, water will continue to drip until valve is clear of the remaining hot water.



ATTENTION

- Since this automatic shut-off valve is linked directly to a shower device, it leaves the function of the tub filling mode uneffected (no limit on hot temperature through that channel)



KEROX

Two Handle Plastic Cartridges

1/4 Turn • ½" Sizes

Model HV-½"

TECHNICAL CHARACTERISTICS OF THE CERAMIC DISCS:

Material:	**Al_2O_3**
Surface roughness Ra:	**< 0.2 µm**
Contact surface area:	**50-80%**

TECHNICAL CHARACTERISTICS OF THE CARTRIDGE:

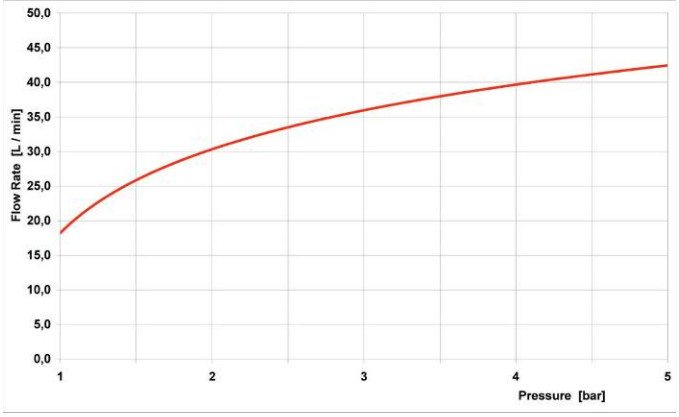
Movement range:	**90°**
Max. temperature:	**90°C / 194°F**
Max. tightening torque:	**8-9 Nm / 70-80 lbf•in**
Pressure test: pneumatic	**6 bar / 87 psi**
hydraulic	**35 bar / 500 psi**
Flow rate:	(3 bar / 45 psi, test faucet, EN 817) **35 l/min / 9.3 gpm** without resistance
Endurance test:	
EN 200	200 000 cycles
ASME A112.18.1	500 000 cycles

- Finest engineering polymers assure high strength, dimensional precision and resistance to liming.
- Ideal for stainless steel faucet.

Open-Anti-Clockwise blue gasket

Open-Clockwise red gasket

FLOW RATE CURVE

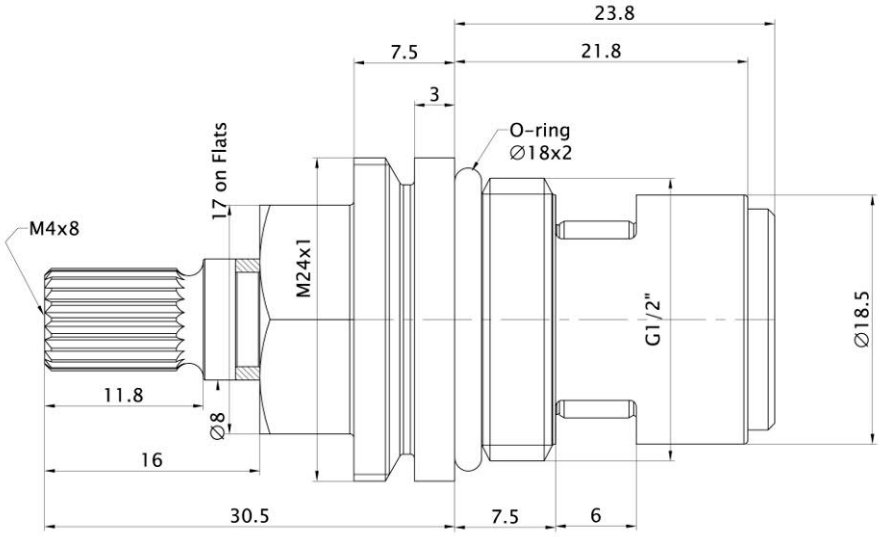


HV - ½”

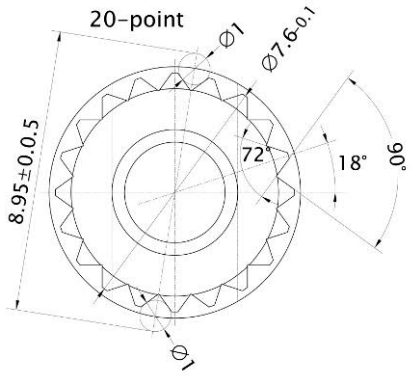
CARTRIDGES

1/4 Turn • ½” Sizes

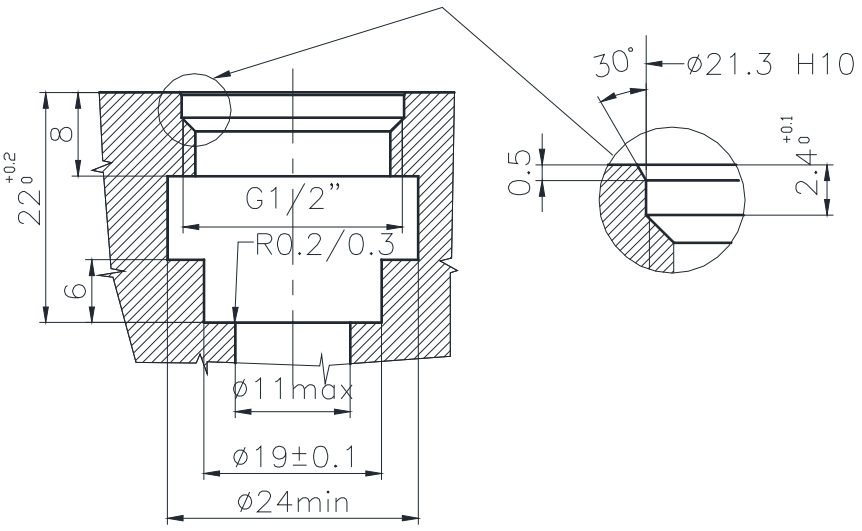
Cartridge



Stem of the cartridge



Bodies



KEROX

Ceramic Mixing Cartridges
With Integral Pressure Balancing
Single-Lever & Rotary (Cycling) Type • 40 mm Sizes
Models PBS-40 • PBR-40

TECHNICAL CHARACTERISTICS OF THE CERAMIC DISCS:

Material:	**AL_2O_3**
Surface roughness Ra:	**0.2 µm**
Contact surface area:	**50-80%**

TECHNICAL CHARACTERISTICS OF THE CARTRIDGE:

	PBS-40	PBR-40
Opening angle:	**25°**	**0°**
Mixing angle:	**110°**	**150°**
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)

PBS-40	PBR-40		
13.0	**16.0**	**l/min**	with resistance „C”
3.4	**4.2**	**gpm**	
13.8	**21.5**	**l/min**	without resistance
3.6	**5.6**	**gpm**	

Outlet water temperature variation:

±1.78°C / ±3°F

Cold water supply failure test:

max. 1.9 l/min / 0.5 gpm within 5s

Endurance test:

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

- All-in-one cartridge provides manual selection of volume (PBS-40 only) and temperature, automatic compensation for differential pressure variations, assuring unchanged temperature output.
- Two models are interchangeable.
- Model PBR-40 is reversible for back-to-back installations.
- Complies with ASSE 1016 standard.

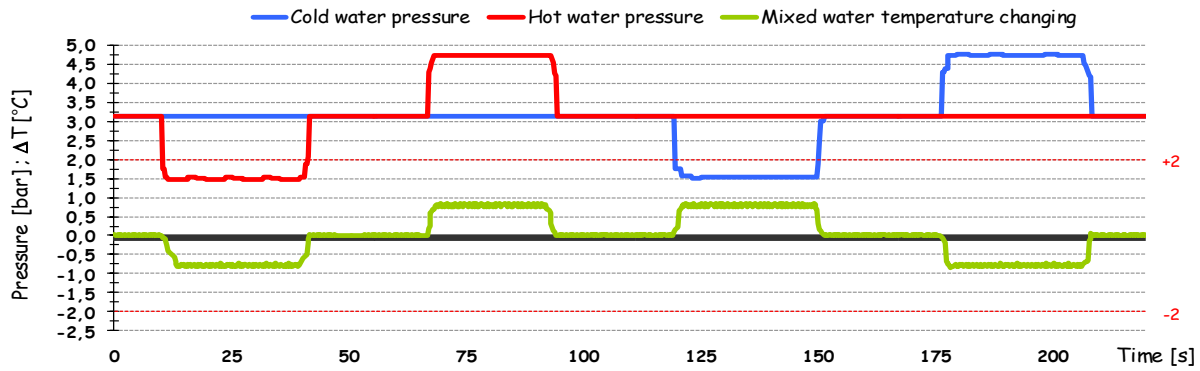
PB-40

CARTRIDGES

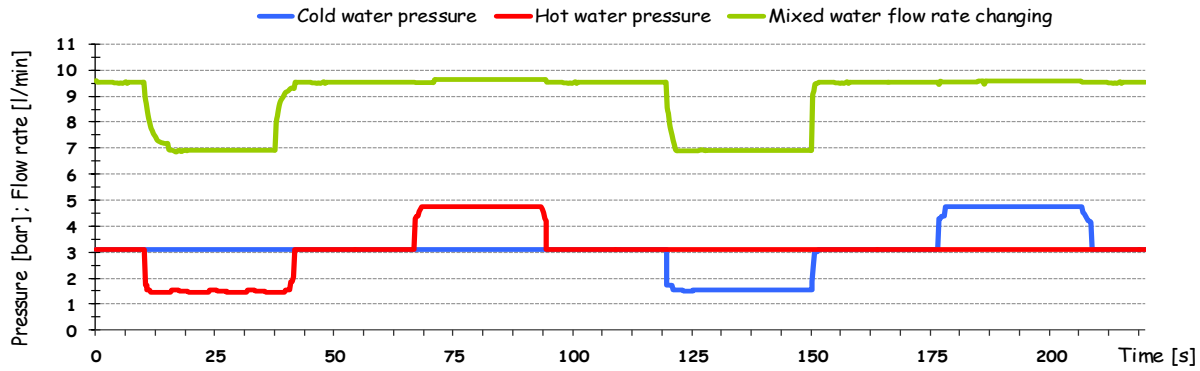
PBS-40 • PBR-40

STABILITY OF MIXED WATER TEMPERATURE WITH +/-50% CHANGING PRESSURE SUPPLY

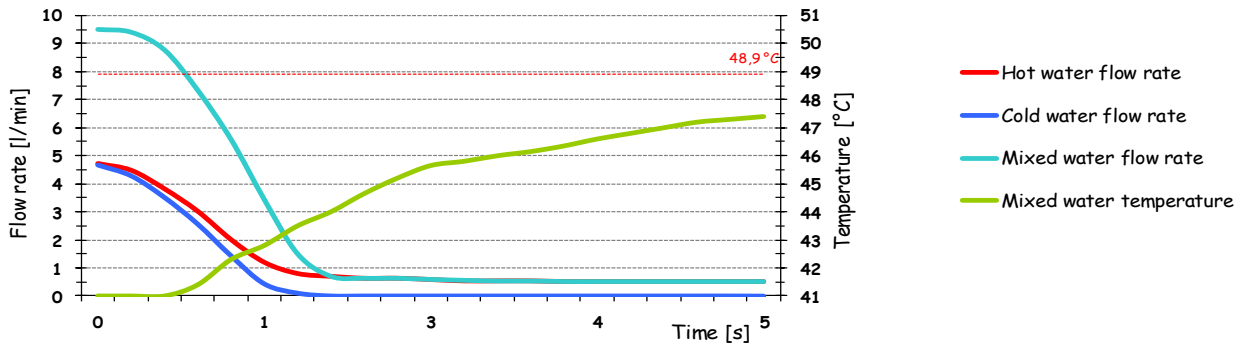
According to: ASSE1016 , ASMEA 112.18.1 , CSAB 125.1



MIXED WATER FLOW RATE WITH +/-50% CHANGING PRESSURE SUPPLY



COLD WATER SUPPLY FAILURE



PB-40

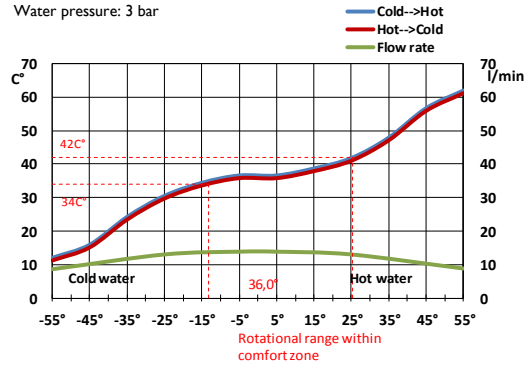
CARTRIDGES

PBS-40 • PBR-40

FLOW RATE & HYSTERESIS CURVES

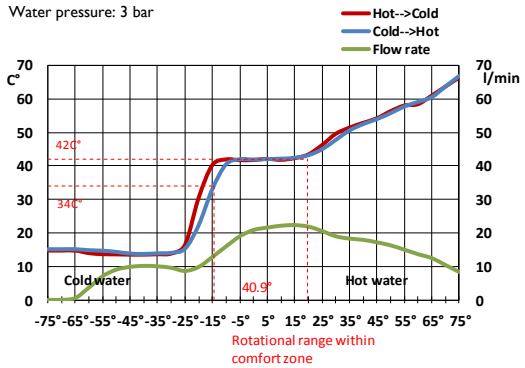
MODEL PBS-40

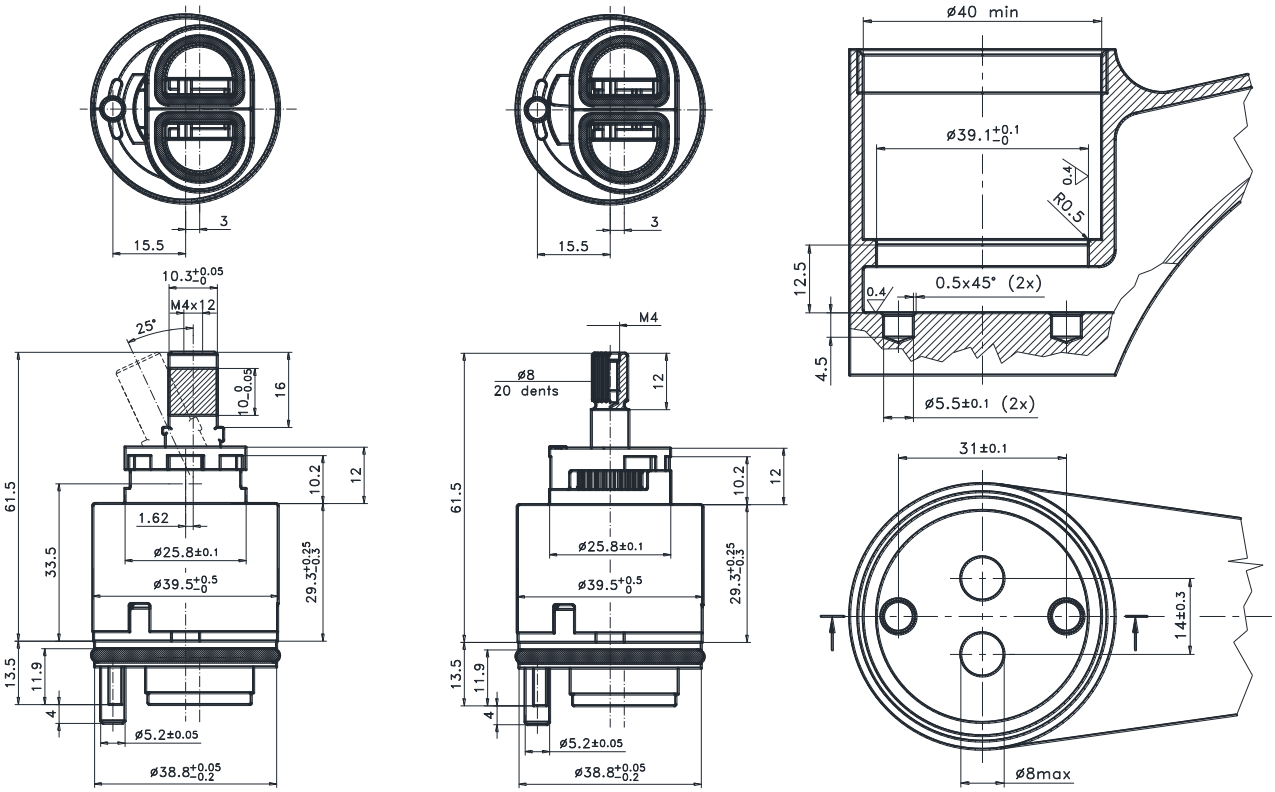
Test faucet, without resistance
Water pressure: 3 bar



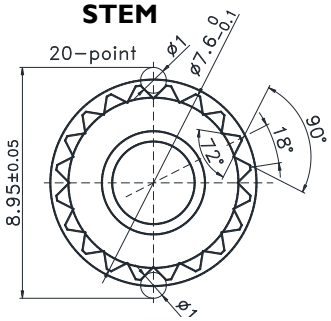
MODEL PBR-40

Test faucet, without resistance
Water pressure: 3 bar





STEM



KEROX

Ceramic Single-Fluid Cartridge

28 mm Size

Model SF-28

TECHNICAL CHARACTERISTICS OF THE CERAMIC DISCS:

Material:	**AL_2O_3**
Surface roughness Ra:	**0,2 µm**
Contact surface area:	**50-80 %**

TECHNICAL CHARACTERISTICS OF THE CARTRIDGE:

Opening angle:	**25°**
Max. water pressure:	**35 bar / 500 psi**
Max. temperature:	**90°C / 194°F**
Max. tightening torque:	**12 Nm / 106 lbf•in**
Pressure test: air	**6 bar / 87 psi**
water	**35 bar / 500 psi**

Flow rate:

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

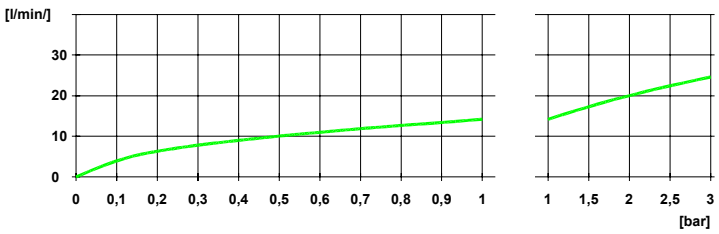
24,6 l/min / 6,5 gpm without resistance

Endurance test:

EN 817	70 000 cycles
ASME A112.18.1	500 000 cycles

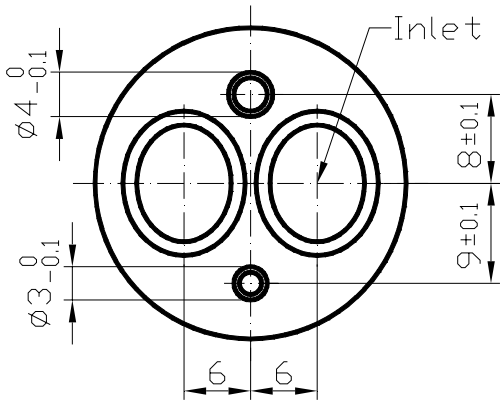
FLOW RATE

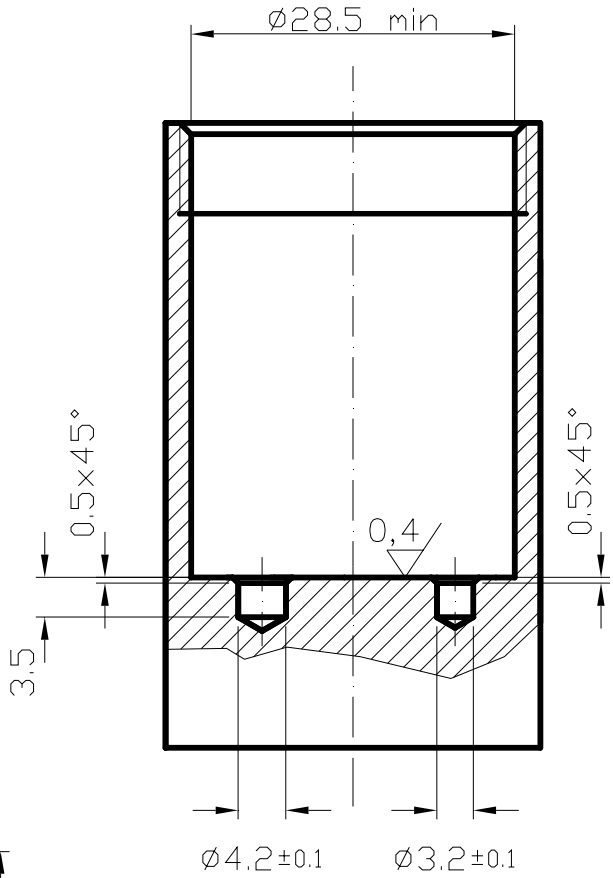
Test faucet, without resistance:
Water pressure: 3 bar

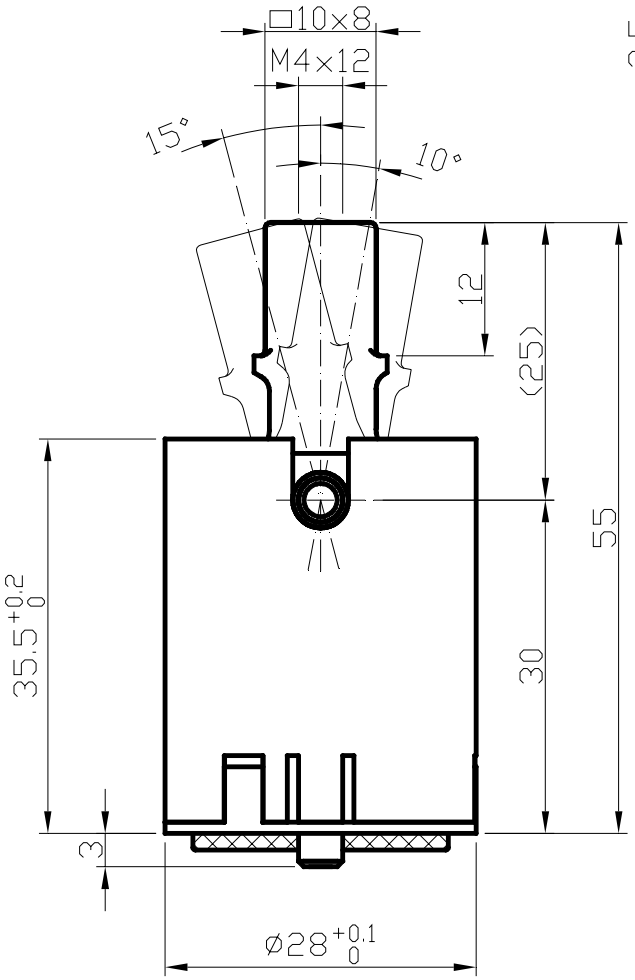


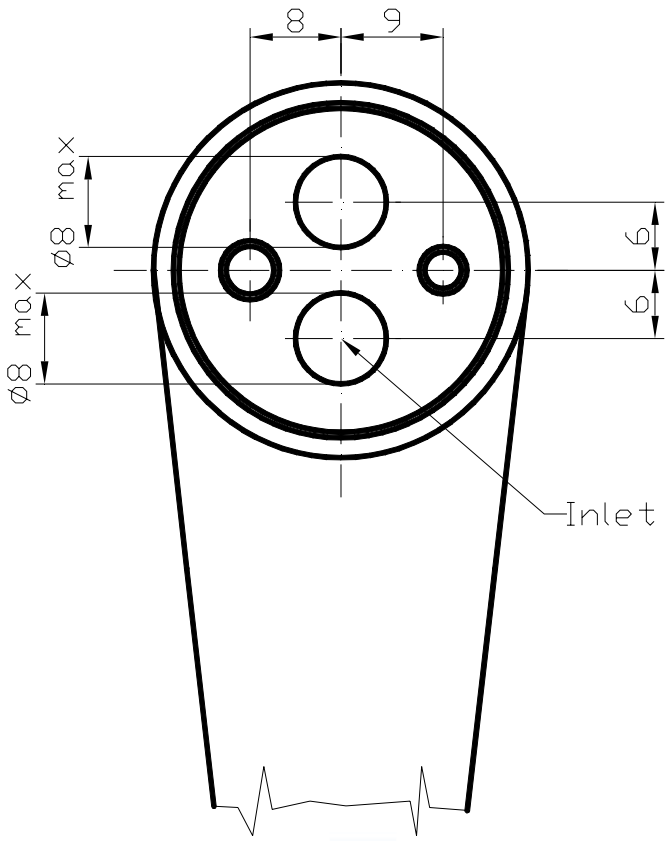
- Single fluid on/off cartridge
- In pairs provide individual lever controls for hot and cold.

SF-28 CARTRIDGE









Cartridge

Body