

FLOW CONTROL VALVES - HTSCO SERIES

M3x0.5mm

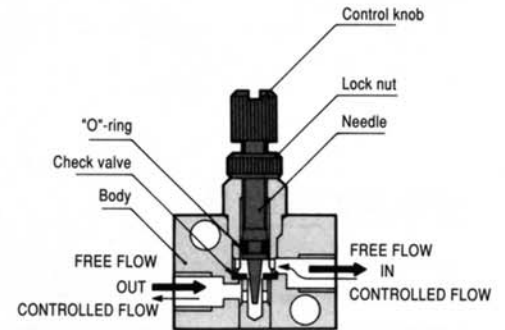
- Able to control speed on sensitive M3 port pen cylinders.
- Extra small, lightweight, easy handling.



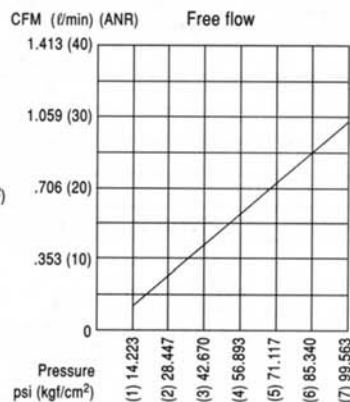
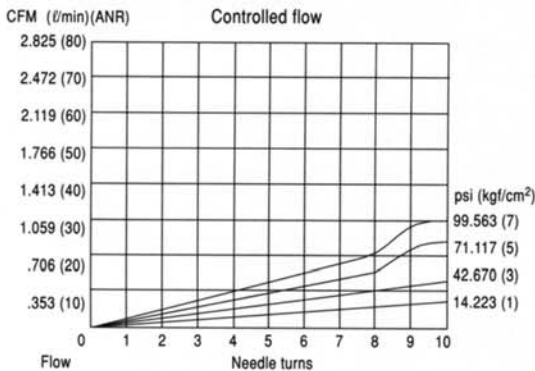
SPECIFICATIONS

| Item | Model | | | |
|--|---------------------|---------------|-----------|-----------------------|
| | HTSCO | HTSCO-L | HTSCO-UC | HTSCO-UL |
| Piping method | Controlled flow in | Female thread | | Universal male thread |
| | Controlled flow out | Female thread | | |
| Port dimension | M3x0.5 | | | |
| Media | Air | | | |
| Max. pressure psi (kgf/cm ²) | 100 (7) | | | |
| Guaranteed pressure psi (kgf/cm ²) | 150 (10.5) | | | |
| Cracking pressure psi (kgf/cm ²) | 7.112 (0.5) | | | |
| Temperature range °F (°C) | 41 ~ 140 (5 ~ 60) | | | |
| Weight oz. (gf) | 0.177 (5) | 0.141 (4) | 0.212 (6) | 0.212 (6) |

DESIGN AND COMPONENT FEATURES



FLOW CHARACTERISTICS



MATERIALS

| Name | Materials |
|--------------|------------------------|
| Body | Copper (nickel plated) |
| Needle | Stainless steel |
| Lock nut | Copper (nickel plated) |
| Check valve | Buna N |
| "O"-ring | |
| Control knob | Copper (nickel plated) |

SPECIAL HANDLING AND PRECAUTIONS

Set lock nuts and thread tightening torques below 0.362 lbs.-ft. (5 kgf-cm).

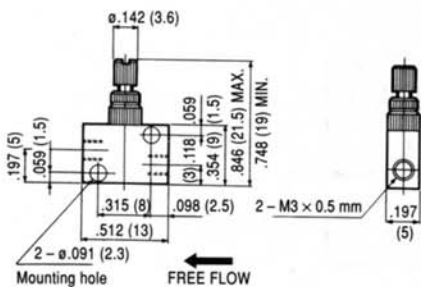
When closing the needle completely, lightly tighten by turning control knob with fingers. If tightened too tight, it may break.

Universal male thread type should be connected after the male piping thread is tightened.

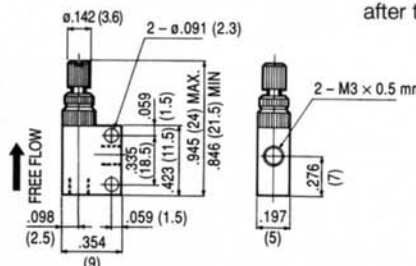
DIMENSIONS

inches (mm)

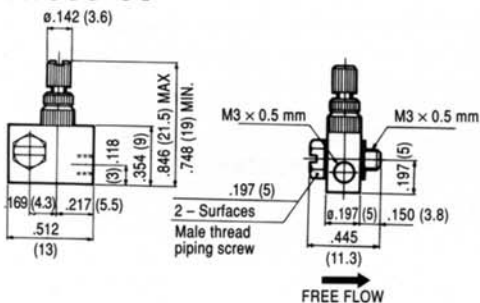
HTSCO



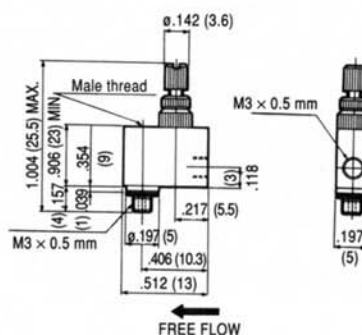
HTSCO-L



HTSCO-UC



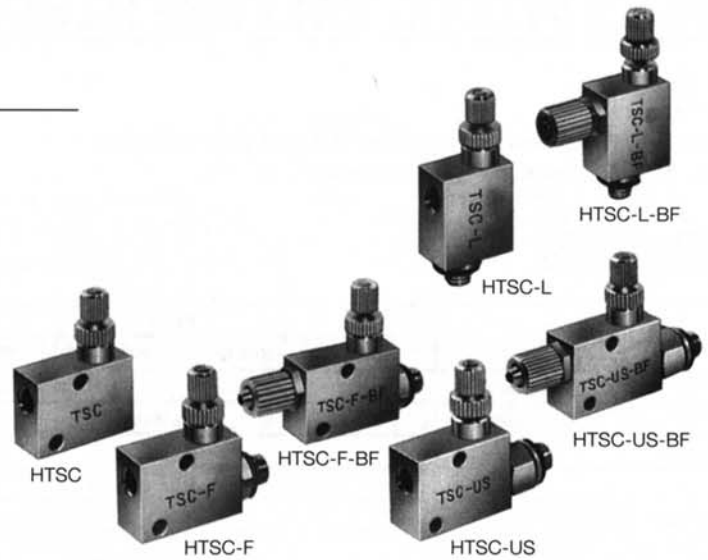
HTSCO-UL



HTSC SERIES

10-32 UNF PORT, FLOW CONTROLS

- Best suited for pen and block cylinders. Extra compact and lightweight.
- Large selection of mounting options.
- Straight and "L" type controls offered.



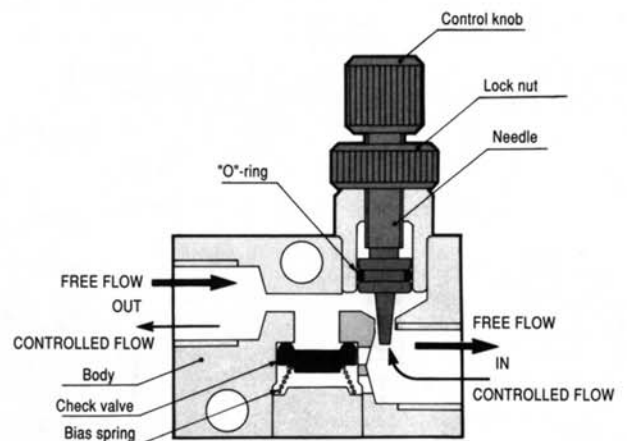
SPECIFICATIONS

| Item | | Model | | | | | | |
|--|---------------------|-------------------|------------------|--|-----------------------------|--|------------------|--|
| | | HTSC | HTSC-F | HTSC-F-BF | HTSC-US | HTSC-US-BF | HTSC-L | HTSC-L-BF |
| Piping method and port thread | Controlled flow in | Female 10-32 UNF | Male 10-32 UNF | Male 10-32 UNF | Male swivel union 10-32 UNF | | Male 10-32 UNF | Male 10-32 UNF |
| | Controlled flow out | Female 10-32 UNF | Female 10-32 UNF | Compression fitting for \varnothing 4x2.5mm tubing | Female 10-32 UNF | Compression fitting for \varnothing 4x2.5mm tubing | Female 10-32 UNF | Compression fitting for \varnothing 4x2.5mm tubing |
| Media | | Air | | | | | | |
| Max. pressure psi (kgf/cm ²) | | 128 (9) | | | | | | |
| Guaranteed pressure psi (kgf/cm ²) | | 192 (13.5) | | | | | | |
| Cracking pressure psi (kgf/cm ²) | | 7.112 (0.5) | | | | | | |
| Temperature range °F (°C) | | 41 ~ 140 (5 ~ 60) | | | | | | |
| Weight oz. (gf) | | 0.566 (16) | 0.637 (18) | 0.726 (20.5) | 0.673 (19) | 0.761 (21.5) | 0.531 (15) | 0.602 (17) |

MATERIALS

| Name | Materials |
|--------------|------------------------|
| Body | Copper (nickel plated) |
| Needle | Stainless steel |
| Lock nut | Copper (nickel plated) |
| Check valve | Buna N |
| *O*-ring | |
| Control knob | Copper (nickel plated) |

DESIGN AND COMPONENT FEATURES

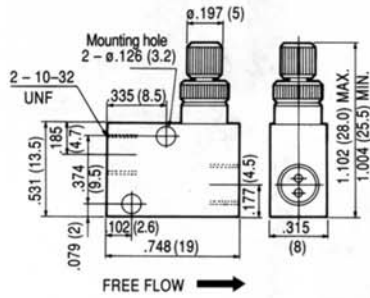


DIMENSIONS

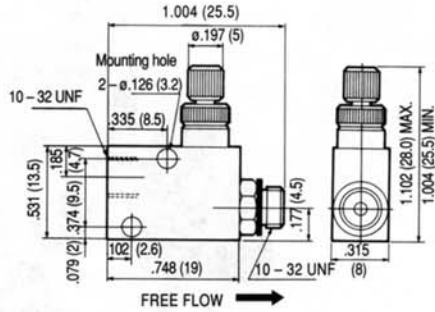
inches (mm)

Straight type

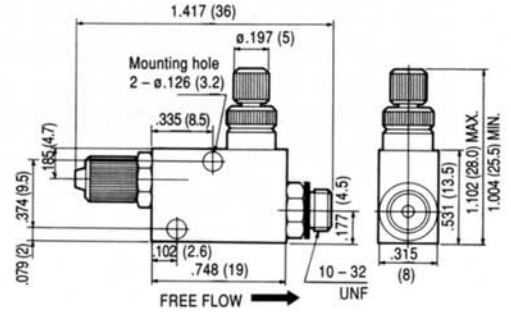
HTSC



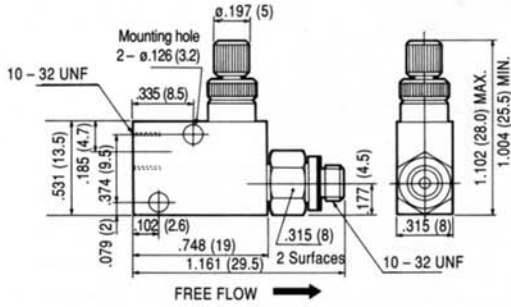
HTSC-F



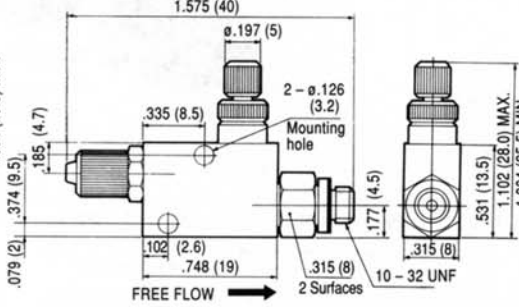
HTSC-F-BF



HTSC-US

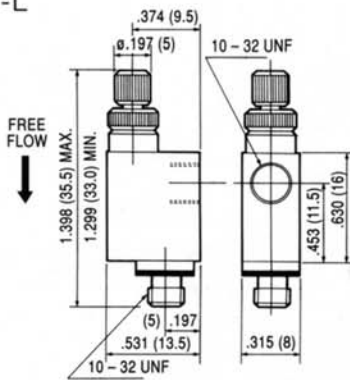


HTSC-US-BF

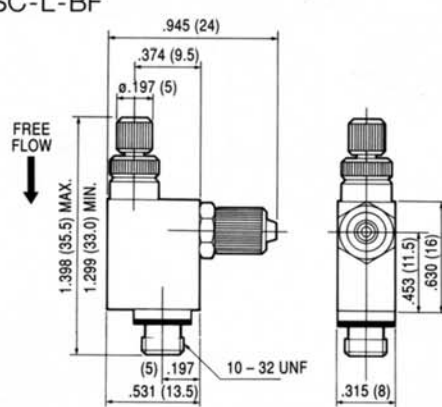


"L" type

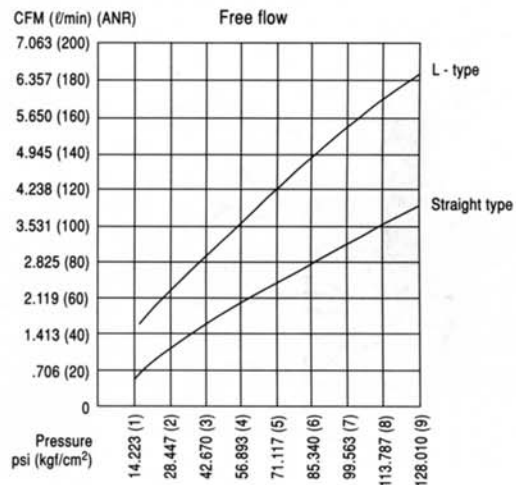
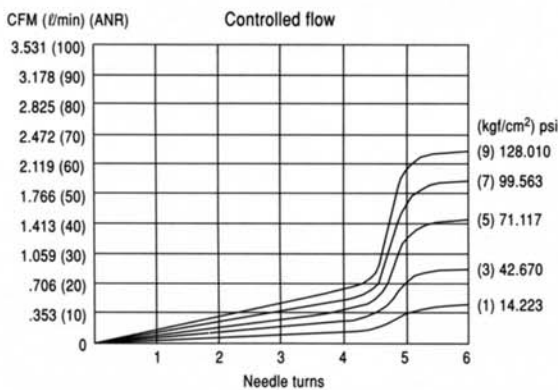
HTSC-L



HTSC-L-BF



FLOW CHARACTERISTICS



HSC SERIES

10-32 UNF, 1/8" NPT

- Best suited for pen, block and slim cylinders. Extra compact and lightweight.
- Many mounting positions available using straight and "L" type valves.
- Swivel union type can easily set piping and needle in convenient positions.



SPECIFICATIONS

| Item | Model | | | | | |
|--|-------------------|-------------|---|-------------|---------------|----------|
| | HSCO | HSCO-F | HSCO-US | HSCO-UL | SC1 | HSC2 |
| Piping methods | Female thread | Male thread | Swivel union male thread Straight Elbow | | Female thread | |
| Port threads | 10-32 UNF | | | | | 1/8" NPT |
| Max. pressure psi (kgf/cm ²) | 128 (9) | | | | | |
| Guaranteed pressure psi (kgf/cm ²) | 192 (13.5) | | | | | |
| Cracking pressure psi (kgf/cm ²) | 7.112 (0.5) | | | 5.689 (0.4) | 4.267 (0.3) | |
| Temperature range °F (°C) | 41 ~ 140 (5 ~ 60) | | | | | |
| Weight oz. (gf) | 1.058 (30) | 1.234 (35) | 1.269 (36) | 3.103 (88) | 1.939 (55) | |

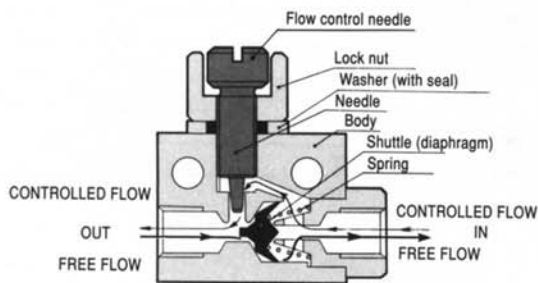
MATERIALS

| Name | Materials |
|---------------------|------------------------|
| Body | Copper (nickel plated) |
| Needle | Stainless steel |
| Lock nut | Copper (nickel plated) |
| Check valve | Buna N |
| "O" ring | |
| Flow control needle | Copper (nickel plated) |

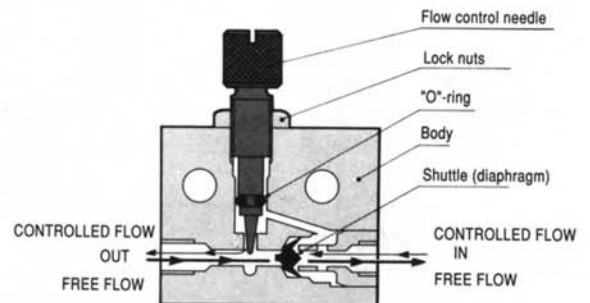
NOTE: HSC2 material is aluminum alloy.

DESIGN AND COMPONENT PARTS

HSCO

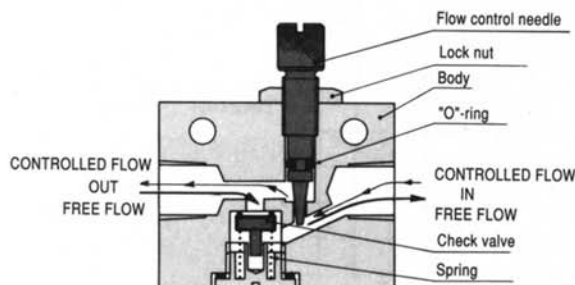


HSC1



NOTE: HSC1 product not identical to product SC1.

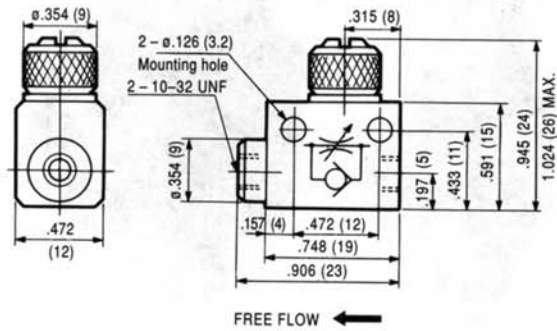
HSC2



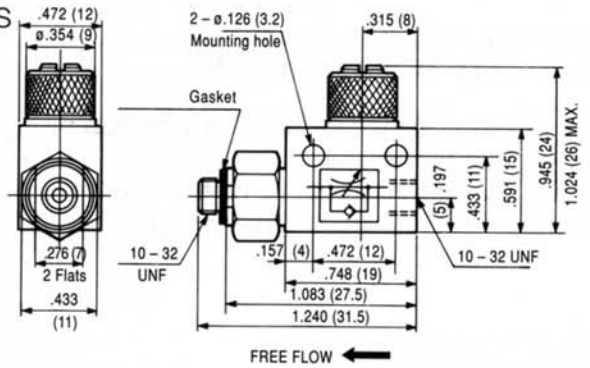
DIMENSIONS

inches (mm)

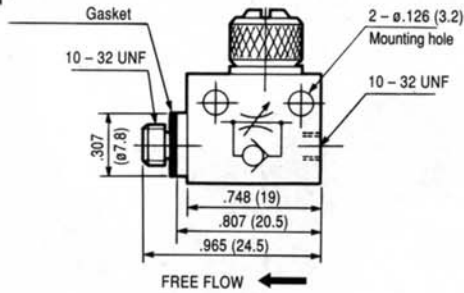
HSCO



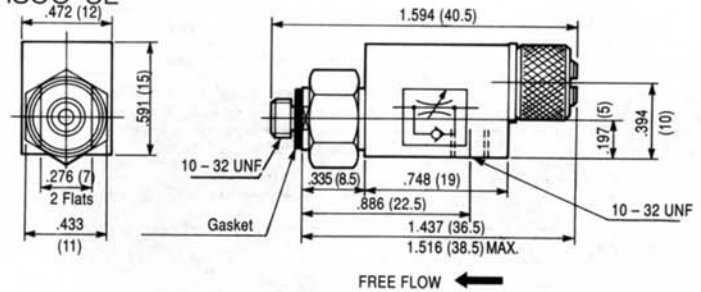
HSCO-US



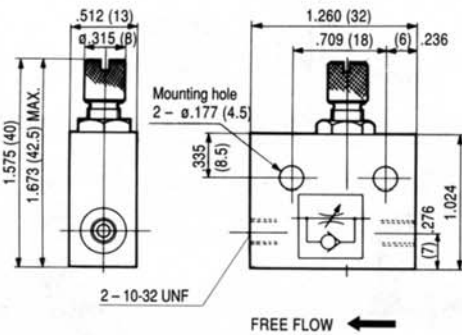
HSCO-F



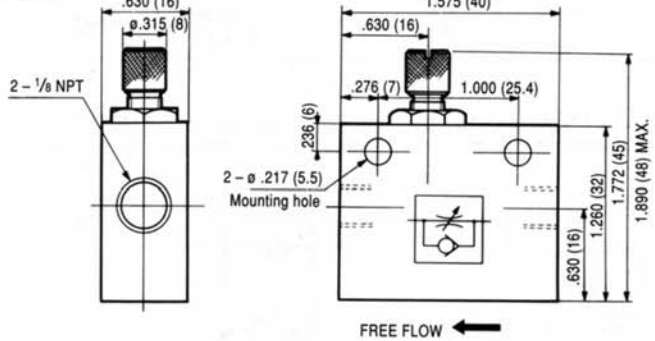
HSCO-UL



HSC1

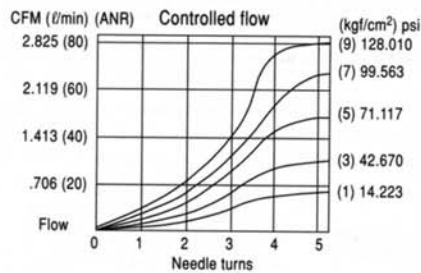


HSC2

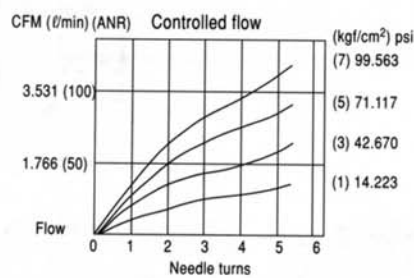


FLOW CHARACTERISTICS

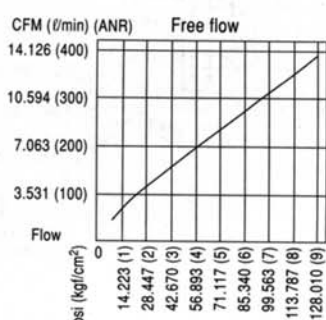
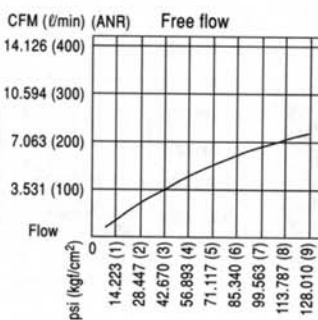
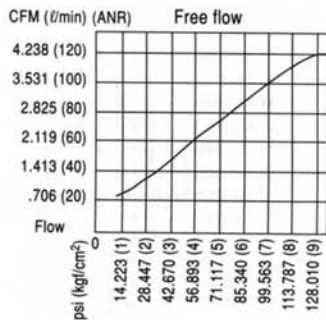
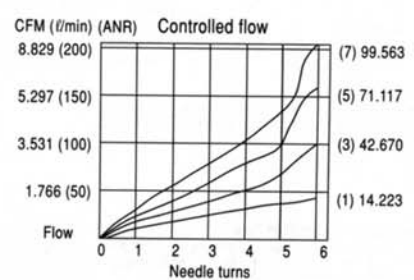
HSCO



HSC1



HSC2



HSCL SERIES

Male thread: 1/8 and 1/4 inch NPT
 Female thread: 1/8 and 1/4 inch NPT

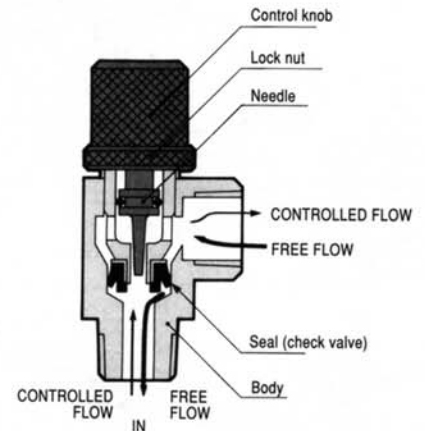
- Recommended for disposable type cylinders.
- Extra small, lightweight.
- Direct connection to cylinder ports.
- Compact installations. "L" type piping.



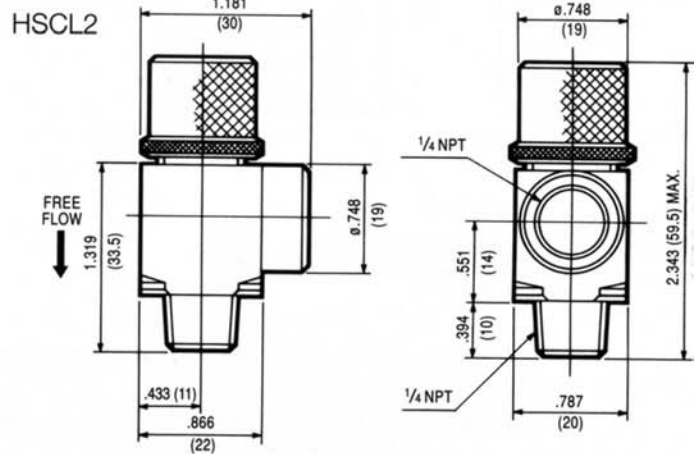
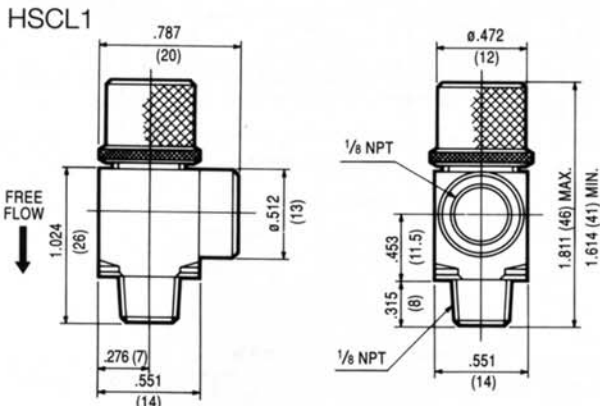
SPECIFICATIONS

| Item | Model | |
|--|--|--|
| | HSCL1 | HSCL2 |
| Type mounting | Male thread specifications | |
| Piping connections dimensions | 1/8" NPT control flow "in" male, "out" female | 1/4" NPT control flow "in" male, "out" female |
| Media | Compressed air (no vacuum) | |
| Max. pressure psi (kgf/cm ²) | 128 (9) | |
| Guaranteed pressure psi (kgf/cm ²) | 192 (13.5) | |
| Cracking pressure psi (kgf/cm ²) | 8.534 (0.6) | |
| Temperature range °F (°C) | 41 ~ 140 (5 ~ 60) | |
| Weight | 1.628 (46) | 4.425 (125) |
| Materials | Body | Copper (nickel plated) |
| | Needle | Stainless steel |
| | Seal | Buna N |

DESIGN AND COMPONENT FEATURES



DIMENSIONS



FLOW CHARACTERISTICS

