

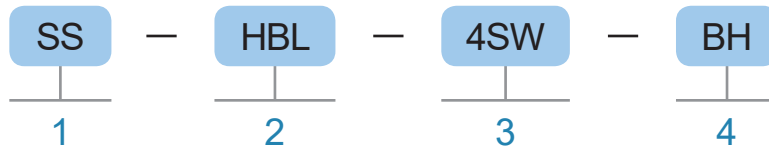
Hex Ball Valves



HBL / HBLK SERIES

- Maximum Working Pressure : 1,000psig (69bar) @ 100°F (38°C)
- Working Temperature Range : 0°F (-17°C) to 302°F (150°C)

HBL SERIES ORDERING INFORMATION



1. BODY MATERIAL

| Material | Designator |
|----------|------------|
| 316 SS | SS |

2. VALVE SERIES

| Orifice Size | Designator |
|--------------|------------|
| 5.0mm | HBL |
| 7.5mm | |
| 9.0mm | |
| 12.5mm | |
| 16.0mm | |

* The Orifice Size is determined using valves with TKF tube fitting end connections.
 * For more details, See the Dimensions Table.

3. INLET / OUTLET CONNECTION SIZE & TYPE

| Inlet / Outlet Connection Size | Designator |
|--------------------------------|------------|
| 1/4" | 4 |
| 3/8" | 6 |
| 1/2" | 8 |
| 3/4" | 12 |
| 1" | 16 |
| 6mm | 6M |
| 8mm | 8M |
| 10mm | 10M |
| 12mm | 12M |

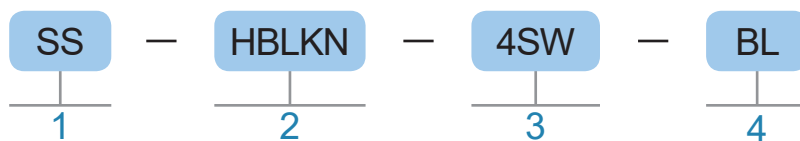
| Inlet / Outlet Connection Type | Designator |
|--------------------------------|------------|
| Lok | SW |
| Female NPT | NF |
| Female ISO® Tapered | PTF |

① Refer to specifications ISO 7/1, BS EN 10226-1, DIN-2999, and JIS B0203.

4. HANDLE TYPE

| Handle Type | Designator |
|--|------------|
| ZINC BUTTERFLY HANDLE with CHROME plated | Blank |
| 316 SS LEVER HANDLE with PE color coated | BH |
| STICK HANDLE | SH |

HBLK SERIES ORDERING INFORMATION



1. BODY MATERIAL

| Material | Designator |
|----------|------------|
| 316 SS | SS |

2. VALVE SERIES

| Orifice Size | Designator |
|--------------|------------|
| 5.0mm | HBLKN |
| 7.5mm | |
| 9.0mm | |
| 12.5mm | |
| 16.0mm | |

* The Orifice Size is determined using valves with TKF tube fitting end connections.
 * For more details, See the Dimensions Table.

3. INLET / OUTLET CONNECTION SIZE & TYPE

| Inlet / Outlet Connection Size | Designator |
|--------------------------------|------------|
| 1/4" | 4 |
| 3/8" | 6 |
| 1/2" | 8 |
| 3/4" | 12 |
| 1" | 16 |
| 6mm | 6M |
| 8mm | 8M |
| 10mm | 10M |
| 12mm | 12M |

| Inlet / Outlet Connection Type | Designator |
|--------------------------------|------------|
| Lok | SW |
| Female NPT | NF |
| Female ISO® Tapered | PTF |

① Refer to specifications ISO 7/1, BS EN 10226-1, DIN-2999, and JIS B0203.

4. HANDLE COLOR

| Color | Designator |
|-------|------------|
| Blue | BL |
| Red | RD |

FEATURES

- Compact Design
- Low Torque and easy operation
- Butterfly, lever and key operation type handle available

TECHNICAL DATA

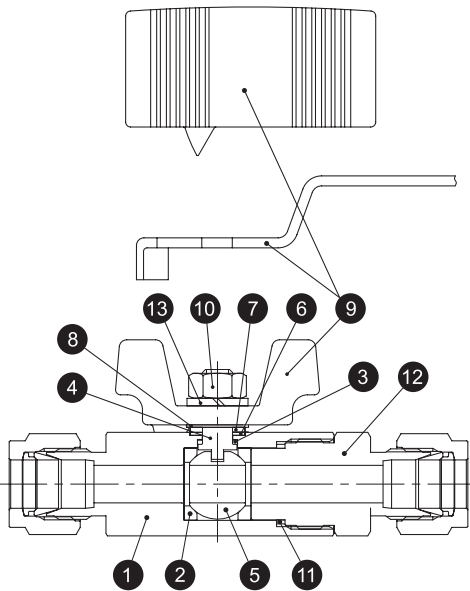
SPECIFICATIONS

| | |
|---------------------------|------------------------------------|
| Maximum Working Pressure | 1,000 psig (69 bar) @ 100°F (38°C) |
| Working Temperature Range | 0°F to 302°F (-17°C to 150°C) |
| Body Material | 316 SS / A479 |
| Port Connections | 1/4" to 1" and 6mm to 16mm |
| Orifice | 5mm to 16.0mm |

TEMPERATURE - WORKING PRESSURE RATING

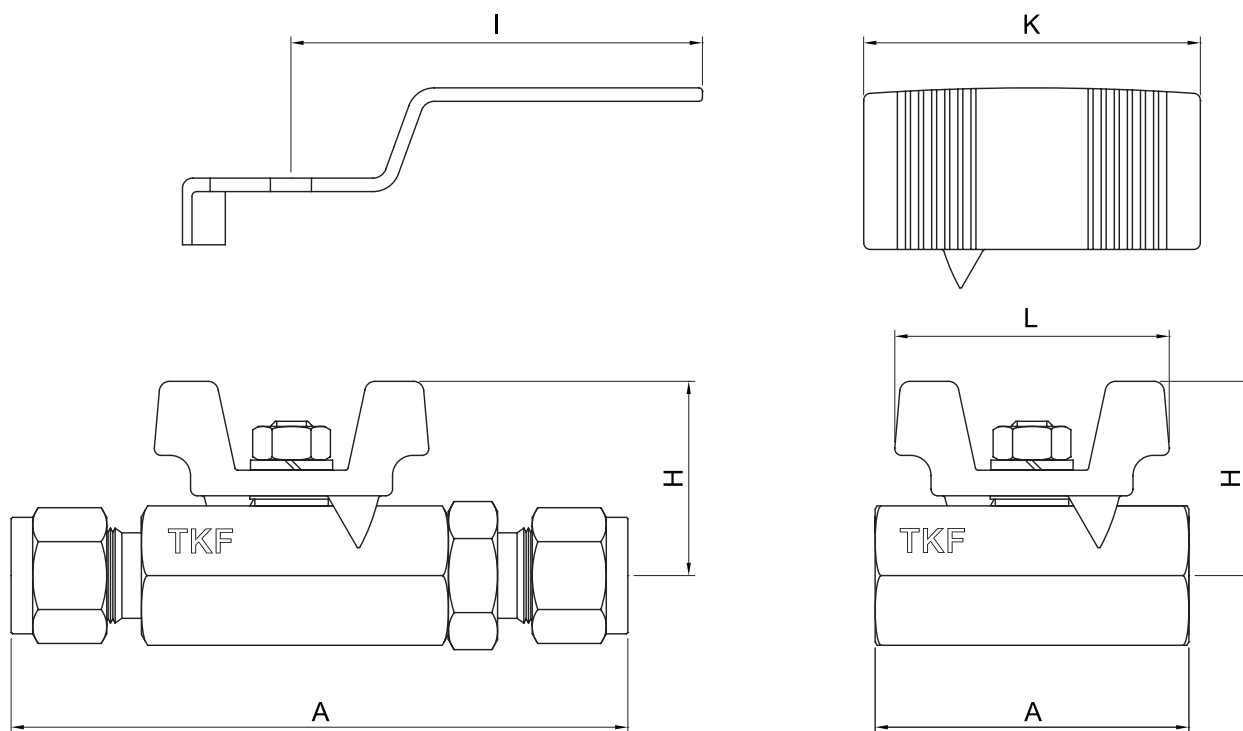
| | |
|----------------------|------------------------------|
| Series | HBL / HBLK |
| Material | 316 SS / A479 |
| Temperature, °F (°C) | Working Pressure, psig (bar) |
| 0 (-17) to 100 (37) | 1000 (69) |
| 150 (65) | 900 (62) |

MATERIALS OF CONSTRUCTION



| No. | Description | Material |
|-----|-------------------|--|
| | | Material Grade/ASTM Specification |
| 1 | BODY | 316 SS / A479 |
| 2 | SEAT | PTFE |
| 3 | LOWER STEM SEAL | PTFE |
| 4 | STEM | 316 SS / A479 |
| 5 | BALL | 316 SS / A479 |
| 6 | UPPER STEM SEAL | PTFE |
| 7 | LOWER STEM SEAL | 316 SS |
| 8 | UPPER STEM WASHER | 316 SS |
| 9 | HANDLE | ZINC BUTTERFLY HANDLE with CHROME plated |
| | | 316 SS LEVER HANDLE with PE color coated |
| | | ADC12 KEY OPERATION TYPE HANDLE |
| | STICK HANDLE | SH |
| 10 | NUT | 316 SS |
| 11 | PACKING | PTFE |
| 12 | ADAPTER | 316 SS / A479 |
| | INSERT | |
| 13 | SPRING WASHER | 316 SS |

DIMENSIONS



| Ordering Number | | Orifice | Cv | End Connections | | Dimensions in. (mm) | | | | |
|-----------------|----------|---------|---------------|-----------------|-------------|---------------------|-------------|--------------|-------------|-------------|
| Series | Part NO. | | | Inlet | Outlet | A | H | I | L | K |
| HBL / HBLKN | 6MSW | 5 | 1.25 | 6mm T-LOK | | 3.15 (80.0) | 0.91 (23.0) | 2.34 (59.5) | 1.18 (30.0) | - |
| | 4SW | | 1.25 | 1/4" T-LOK | | | | | | |
| | 4NF | | 1.4 | 1/4" Female NPT | | | | | | |
| | 4PTF | | 1.4 | 1/4" Female PT | | | | | | |
| | 10MSW | 7.5 | 2.6 | 10mm T-LOK | | 3.59 (91.2) | 1.14 (28.9) | 3.19 (81.0) | 1.61 (41.0) | - |
| | 6SW | | 2.5 | 3/8" T-LOK | | | | | | |
| | 6NF | | 2.6 | 3/8" Female NPT | | | | | | |
| | 6PTF | | 2.6 | 3/8" Female PT | | | | | | |
| | 12MSW | 9 | 9.5 | 12mm T-LOK | | 3.99 (101.4) | 1.38 (35.0) | 1.97 (50.0) | 1.97 (50.0) | - |
| | 8SW | | 9.5 | 1/2" T-LOK | | | | | | |
| | 8NF | | 9.5 | 1/2" Female NPT | | | | | | |
| | 8PTF | | 9.5 | 1/2" Female PT | | | | | | |
| | 12SW | 12.5 | 12.7 | 3/4" T-LOK | | 4.19 (106.3) | 1.48 (37.5) | 4.04 (102.5) | 2.05 (52.0) | 2.52 (64.0) |
| | 12NF | | 12.7 | 3/4" Female NPT | | 2.41 (61.3) | | | | |
| | 12PTF | | 12.7 | 3/4" Female PT | | | | | | |
| | 16SW | 16 | 17.5 | 1" T-LOK | | 5.16 (131.0) | 1.77 (45.0) | 2.56 (65.0) | 2.52 (64.0) | - |
| 16NF | 17.5 | | 1" Female NPT | | 2.99 (76.0) | | | | | |
| 16PTF | 17.5 | | 1" Female PT | | | | | | | |