The right connection
The right environment

# Check Valve - Screw in cartridge
# KSC

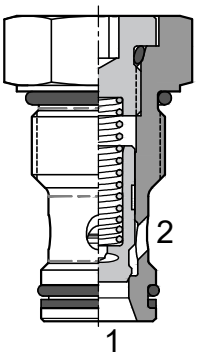
Ref. No. H06925
Release: Apr 2025



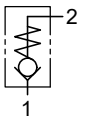
## Description

KSC Check valves are TWO port screw in cartridge valves that are designed to fit in a cavity conforming to ISO 7789
These are seat type valves, available in four different sizes and with five different cracking pressures in each size.
Check valves allow free flow in one direction while providing leak free closure in reverse direction.

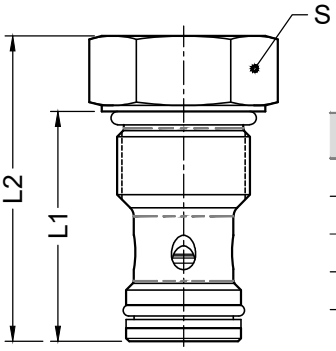
## Section




Hydraulic Symbol




## Unit dimensions




| Part code | L1 | L2 | M | S | Torque |
|---|---|---|---|---|---|
| **KSC06** | 30.0 | 41.5 | M20 | 27 | 140 Nm |
| **KSC10** | 38.0 | 52.5 | M22 | 27 | 150 Nm |
| **KSC16** | 49.5 | 81.5 | M33 | 41 | 350 Nm |
| **KSC20** | 55.0 | 91.0 | M42 | 50 | 500 Nm |

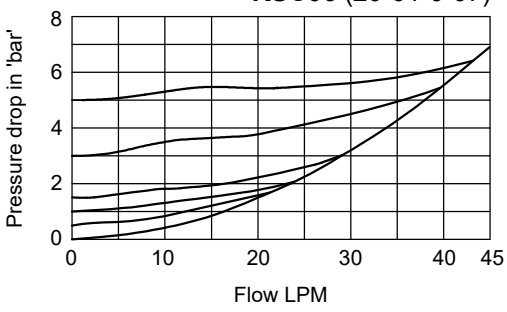
## Technical Specifications

Construction ---------- Poppet seat type
Mounting style ---------- Screw in cavity as per ISO 7789
Mounting position ---------- Optional
Flow direction ---------- Free flow from 1 to 2
Operating pressure ---------- 350 bar

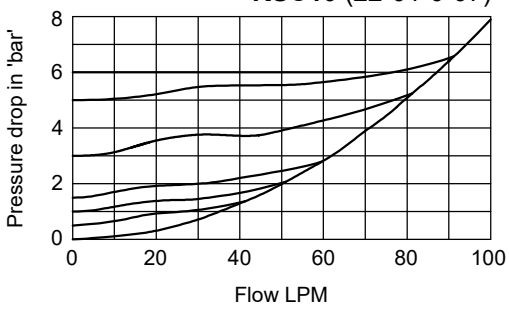
Hydraulic medium ---------- Mineral oil.
Viscosity range ---------- 10 cSt to 380 cSt
Fluid temperature range ---------- -20 °C to +80 °C (With Nitrile seals)
-10 ºC to +100 ºC (With Viton seals)
Fluid cleanliness requirement ----- As per ISO 4406 20/18/15
Nom. flow handling capacity ------- Refer graphs

Performance curves - Testing as per ISO 6403. Oil used : ISO VG 68, Viscosity : 46 cSt @ 40 °C  Direction of flow 1 to 2

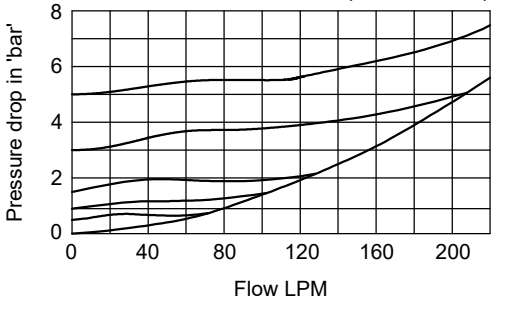
**KSC06** (20-01-0-07)



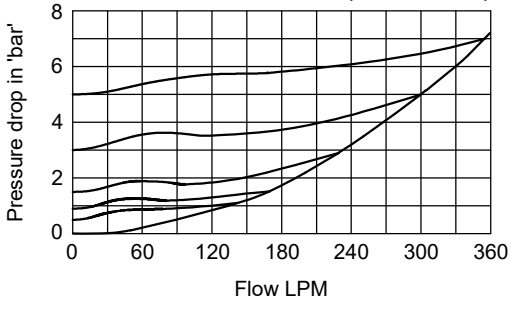

**KSC10** (22-01-0-07)



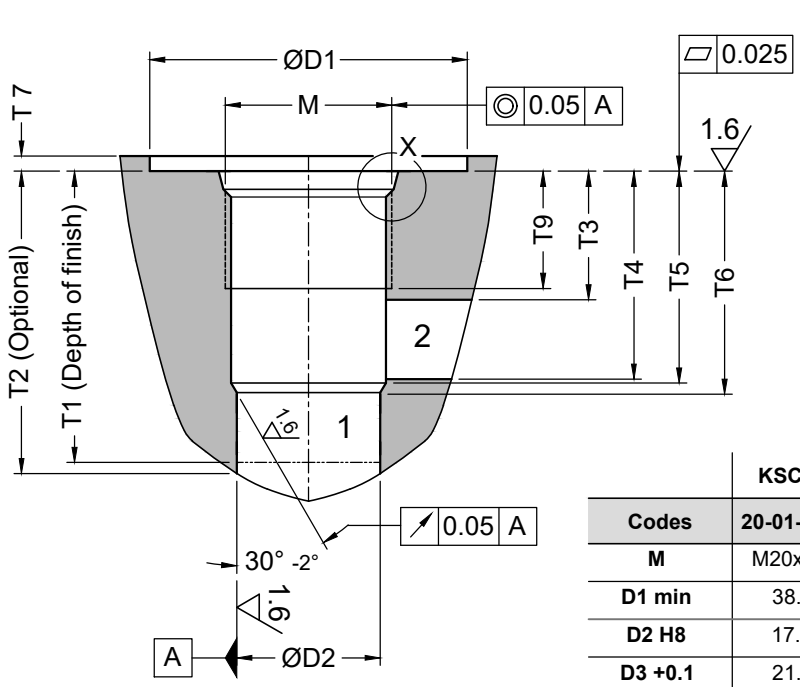

**KSC16** (33-01-0-07)

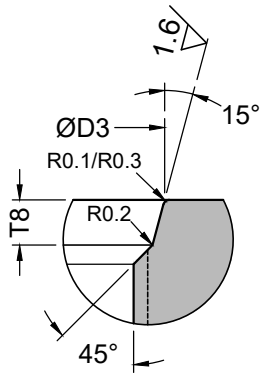



**KSC20** (42-01-0-07)



## Cavity details




| | KSC06 | KSC10 | KSC16 | KSC20 |
|---|---|---|---|---|
| **Codes** | **20-01-0-07** | **22-01-0-07** | **33-01-0-07** | **42-01-0-07** |
| **M** | M20x1.5 | M22x1.5 | M33x2.0 | M42x2.0 |
| **D1 min** | 38.0 | 42.0 | 58.0 | 74.0 |
| **D2 H8** | 17.0 | 19.0 | 29.0 | 38.0 |
| **D3 +0.1** | 21.8 | 23.8 | 35.4 | 44.4 |
| **T1 min** | 30.5 | 38.5 | 50.0 | 56.0 |
| **T2 +1** | 32.0 | 40.0 | 52.0 | 58.0 |
| **T3 min** | 14.5 | 17.0 | 22.0 | 23.0 |
| **T4 max** | 20.5 | 27.5 | 38.5 | 43.5 |
| **T5 +0.4 (ref)** | 21.0 | 28.0 | 39.0 | 44.0 |
| **T6 +0.4** | 22.3 | 29.3 | 40.7 | 45.7 |
| **T7 max** | 2.0 | 2.0 | 2.5 | 2.5 |
| **T8 +0.4** | 2.4 | 2.4 | 3.1 | 3.1 |
| **T9 min** | 14.5 | 15.5 | 19.0 | 19.5 |

## Ordering Code

| KS | C | 10 | A | X | V | 1.X |
|---|---|---|---|---|---|---|

**KS** — Screw in Cartridge

**C** — Check Valve - C

| Valve Size | |
|---|---|
| 20-01-0-07 | **06** |
| 22-01-0-07 | **10** |
| 33-01-0-07 | **16** |
| 42-01-0-07 | **20** |

| Spring Cracking | |
|---|---|
| 0.5 bar | **A** |
| 1.0 bar | **B** |
| 1.5 bar | **C** |
| 3.0 bar | **D** |
| 5.0 bar | **E** |
| No Spring | **X** |

**X** — Non Adjustable cracking pressure

| Seals | |
|---|---|
| **N** | Nitrile |
| **V** | Viton |

**1.X** — Design Series
Subject to revision

1.0 to 1.9
Externally interchangable