

HYDAC High Pressure Ball Valves

KHB & KHM Series 2-way Ball Valves with SAE & NPT Connections



KHB Series
Block Housing



KHM Series
Forged Housing

Specifications

- 1/4" - 2" Full Port Design
- NPT or SAE O-Ring connections
- Polyacetal Ball Seals (*standard*)
- FPM (Fluoroelastomer) O-Rings (*standard*)
- Carbon Steel Housing
- Block Housing - Sizes 06 - 25
- Forged Housing - Sizes 32 - 50
- Operating Pressure to 7250 psi Depending on Valve Size and Seal Materials Selected
- Temp Range: 14°F to 176°F with Standard materials (1114) up to max. pressure rating. Extended Temperature range -40°F to 392°F on request with special materials and reduced pressure rating (see page 24).

Model Code

KHB - 16 NPT - 1 1 1 4 - 11X - L

Housing Type

- KHB = Block Housing, Carbon Steel - Sizes 06 - 25
- KHM = Forged Housing, Carbon Steel - Sizes 32 - 50
- KHM = Forged Housing, Stainless Steel - Sizes 06 - 50 (*see page 12 for details*)

Nominal Sizes

Nom Size	SAE		NPT	
	Tube Size	Thread Size	Pipe Size	Pipe ϕ D
06	-4	7/16-20 UNF	1/4"	0.540"
10	-6	9/16-18 UNF	3/8"	0.675"
16	-8	3/4-16 UNF	1/2"	0.840"
20	-12	1-1/16-12 UN	3/4"	1.050"
25	-16	1-5/16-12 UN	1"	1.315"
32	-20	1-5/8-12 UN	1-1/4"	1.660"
40	-24	1-7/8-12 UN	1-1/2"	1.900"
50	-32	2-1/2-12 UN	2"	2.375"

Connection Type

- NPT = ANSI/ASME 1.20.1 Taper Pipe Thread
- SAE = SAEJ1926 Ports with ISO 725 Threads and O-Ring Sealing

Body Material

- 1 = Carbon Steel (*phosphate coated*)
- 3 = Stainless Steel (*see page 12 for ordering details*)

Spindle and Ball Material

- 1 = Carbon Steel (*ball is chrome plated, spindle is zinc plated*)
- 3 = Stainless Steel

Ball Seal Material

- 1 = Polyacetal (*standard*)
- 3 = PTFE (*1500 psi max*)
- 8 = PEEK

O-Ring Material

- 2 = NBR (*Buna*)
- 3 = PTFE Spindle Seals and FPM (*fluoroelastomer*) O-Rings (*1500 psi max*)
- 4 = FPM (*fluoroelastomer*) (*standard*)
- 5 = EPR

Handle Codes

- 09x = Without Handle (*see page 24 to order handle separately*)
- 11x = Straight Aluminum, Sizes 06-25
- 16x = Offset Steel, Sizes 32-50

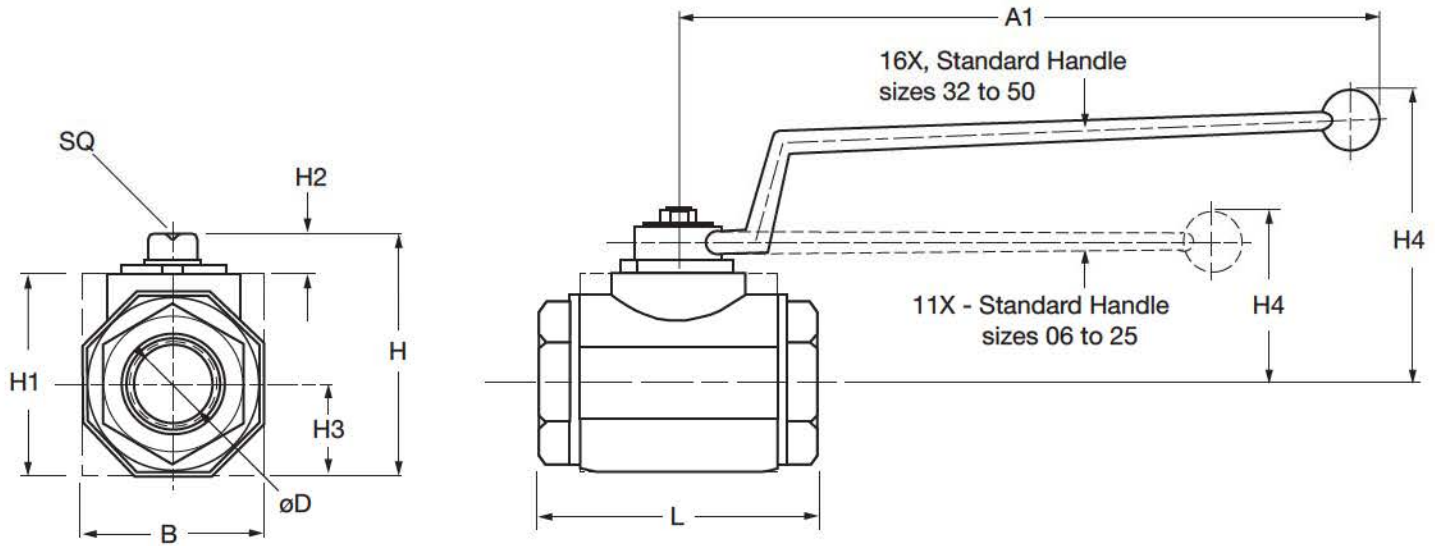
Locking Device Option

- L = Locking Device (*see page 21 to order locking device separately*)
- LS = Locking Device with 5 amp Limit Switch, Available for sizes 20-50 (*Not available with PTFE Spindle Seals*)

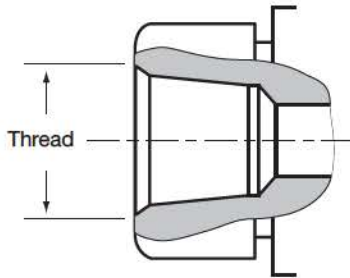
Model Codes containing selections listed in RED are non-standard items - Minimum quantities will apply - Contact HYDAC for information and availability
Not all combinations are available

High Pressure Ball Valves **HYDAC**

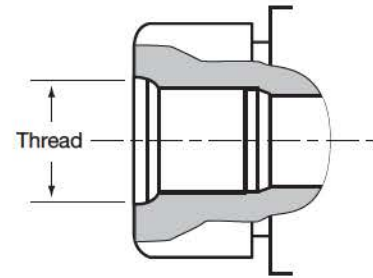
Dimensions



NPT Port
Internal Thread



SAE Port
Straight Thread
O-Ring Boss



Model	Thread	max. psi*	A1	B	øD	H	H1	H2	H3	H4	L	SQ	Weight
KHB-06SAE	7/16-20UNF (SAE 4)	7250	5.91 (150)	0.98 (25)	0.24 (6)	1.89 (48)	1.38 (35)	0.28 (7)	0.51 (13)	1.65 (42)	2.72 (69)	0.35 (9)	0.66 (0.3)
KHB-06NPT	1/4" NPT												
KHB-10SAE	9/16-18UNF (SAE 6)	7250	5.91 (150)	1.26 (32)	0.39 (10)	2.09 (53)	1.57 (40)	0.33 (8.5)	0.67 (17)	1.69 (43)	2.83 (72)	0.35 (9)	1.10 (0.5)
KHB-10NPT	3/8" NPT												
KHB-16SAE	3/4-16UNF (SAE 8)	5800	6.88 (175)	1.50 (38)	0.63 (16)	2.48 (63)	1.77 (45)	0.43 (11)	0.75 (19)	2.01 (51)	3.27 (83)	0.47 (12)	1.65 (0.75)
KHB-16NPT	1/2" NPT												
KHB-20SAE	1-1/16-12UN (SAE 12)	5000	7.88 (200)	1.89 (48)	0.79 (20)	2.95 (75)	2.24 (57)	0.43 (11)	0.96 (24.5)	2.28 (58)	3.74 (95)	0.55 (14)	2.87 (1.3)
KHB-20NPT	3/4" NPT												
KHB-25SAE	1-5/16-12UN (SAE 16)	5000	7.88 (200)	2.24 (57)	0.98 (25)	3.23 (82)	2.52 (64)	0.43 (11)	1.12 (28.5)	2.40 (61)	4.45 (113)	0.55 (14)	4.41 (2.0)
KHB-25NPT	1" NPT												
KHM-32SAE	1-5/8-12UN (SAE 20)	5000	12.00 (305)	2.95 (75)	1.18 (30)	4.06 (103)	3.35 (85)	0.47 (12)	1.48 (37.5)	5.94 (151)	4.33 (110)	0.67 (17)	6.84 (3.1)
KHM-32NPT	1-1/4" NPT												
KHM-40SAE	1-7/8-12UN (SAE 24)	5000	12.00 (305)	3.35 (85)	1.50 (38)	4.49 (114)	3.78 (96)	0.47 (12)	1.67 (42.5)	6.18 (157)	5.12 (130)	0.67 (17)	9.70 (4.4)
KHM-40NPT	1-1/2" NPT												
KHM-50SAE	2-1/2-12UN (SAE 32)	5000	12.00 (305)	4.13 (105)	1.89 (48)	5.18 (131.5)	4.43 (112.5)	0.47 (12)	2.07 (52.5)	6.46 (164)	5.51 (140)	0.67 (17)	14.55 (6.6)
KHM-50NPT	2" NPT												

Dimensions are for general information only, all critical dimensions should be verified by requesting a certified print.

Dimensions are in inches/(mm) and lbs./kg.

*Dependent upon valve and seal materials selected.