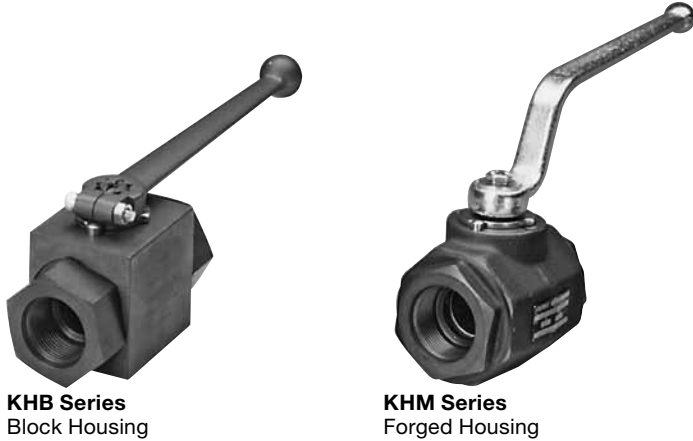


KHB & KHM Series 2-way Ball Valves with SAE & NPT Connections



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).

KHB Series
Block Housing

KHM Series
Forged Housing

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

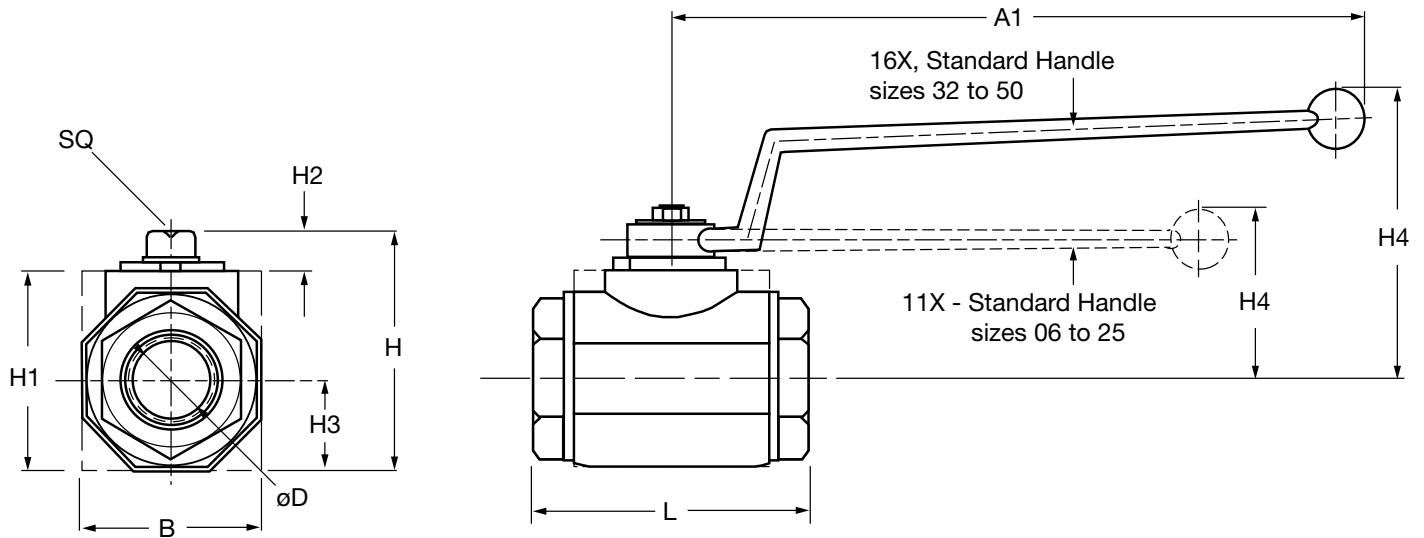
- 09x = Without Handle (*see page 24 to order handle separately*)
- 11x = Straight Aluminum, Sizes 06-25
- 16x = Offset Steel, Sizes 32-50

Locking Device Option

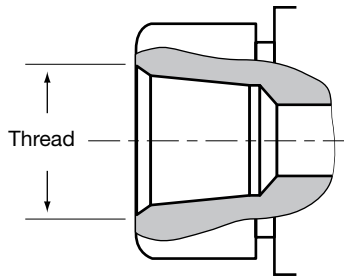
- L = Locking Device (*see page 21 to order locking device separately*)
- LS = Locking Device with 5 amp Limit Switch, Available for sizes 20-50 (Not available with PTFE Spindle Seals)**

*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*

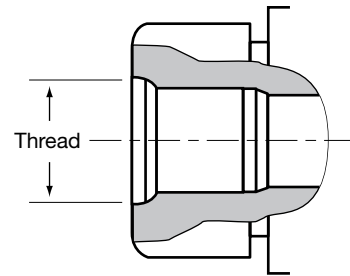
Dimensions



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												

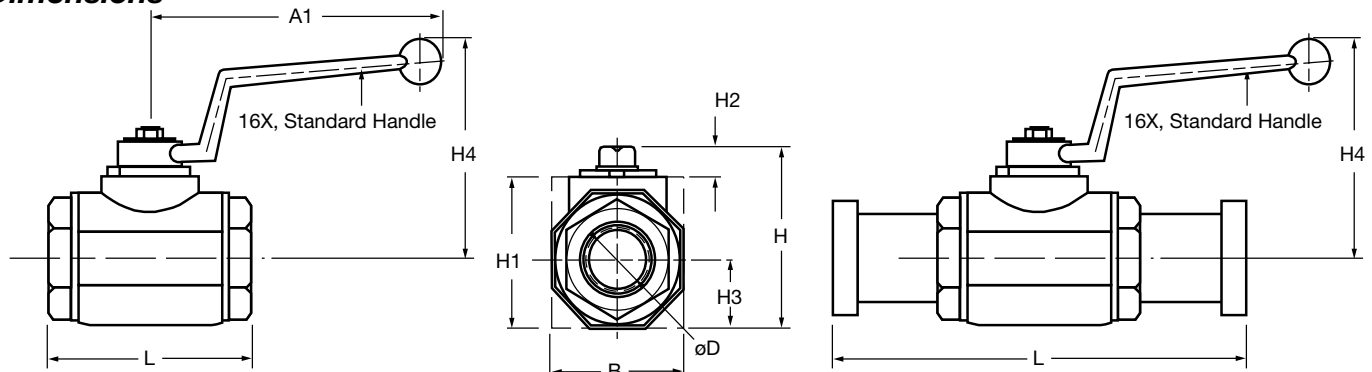
KHM Series 2-way Stainless Steel Ball Valves



Specifications:

- 1/4" to 2" Full Port Design
- Connection types available:
NPT: Tapered Pipe Threads, ANSI/ASME B.1.20.1
SAE: SAE J1926/1 Straight Thread O-ring Boss Port
F3: SAE J518 (Code 61), split flange halves not included.
F6: SAE J518 (Code 62), split flange halves not included.
- Materials:
Housing, Ball and Spindle made of 1.4571 SS (~316 SS)
Polyacetal (POM + MoS2) Ball Seals
Fluorocarbon (FPM) O-rings
- Offset Zinc-plated Steel Handles
- Temperature Range: -4° to 176°F at full pressure

Dimensions



Nom. Size	Connection Size/Type	Model Code	Part Number	Press Rating	Dimensions in millimeters								
					A1	B	øD	H	H1	H2	H3	H4	L
DN 06 (1/4")	1/4" NPT	KHM-06NPT-3314-16X	02078586	7250	101	28	6	49	37	8	14	54	69
	SAE-4	KHM-06SAE-3314-16X	02078587	7250	101	28	6	49	37	8	14	54	69
DN 10 (3/8")	3/8" NPT	KHM-10NPT-3314-16X	02078588	7250	101	36	10	53	41	8	18	54	72
	SAE-6	KHM-10SAE-3314-16X	02077119	7250	101	36	10	53	41	8	18	54	72
DN 16 (1/2")	1/2" NPT	KHM-16NPT-3314-16X	02078589	5800	175	46	16	66	49	8	23	91	83
	SAE-8	KHM-16SAE-3314-16X	02066415	5800	175	46	16	66	49	11	23	91	83
	1/2" code 61	KHM-16F3-3314X-16X	02077118	5000	175	46	16	66	49	11	23	91	150.8
	1/2" code 62	KHM-16F6-3314X-16X	02078590	5800	175	46	16	66	49	11	23	91	150.8
DN 20 (3/4")	3/4" NPT	KHM-20NPT-3314-16X	02066406	5000	175	56	20	78	60	12	28	98	95
	SAE-12	KHM-20SAE-3314-16X	02078591	5000	175	56	20	78	60	12	28	98	95
	3/4" code 61	KHM-20F3-3314X-16X	02078592	5000	175	56	20	78	60	12	28	98	169.8
	3/4" code 62	KHM-20F6-3314X-16X	02068045	5000	175	56	20	78	60	12	28	98	169.8
DN 25 (1")	1" NPT	KHM-25NPT-3314-16X	02078593	5000	175	65	25	83	66	12	30	101	113
	SAE-16	KHM-25SAE-3314-16X	02078594	5000	175	65	25	83	66	12	30	101	113
	1" code 61	KHM-25F3-3314X-16X	02070901	5000	175	65	25	83	66	12	30	101	176.5
	1" code 62	KHM-25F6-3314X-16X	02073032	5000	175	65	25	83	66	12	30	101	198.5
DN 32 (1-1/4")	1-1/4" NPT	KHM-32NPT-3314-16X	02062809	5000	306	78	30	104	86	12	39	151	110
	SAE-20	KHM-32SAE-3314-16X	02078359	5000	306	78	30	104	86	12	39	151	110
	1-1/4" code 61	KHM-32F3-3314X-16X	02077117	4000	306	78	30	104	86	12	39	151	191.4
	1-1/4" code 62	KHM-32F6-3314X-16X	02078595	5000	306	78	30	104	86	12	39	151	223.4
DN 40 (1-1/2")	1-1/2" NPT	KHM-40NPT-3314-16X	02062807	5000	306	91	38	117	99	12	46	157	130
	SAE-24	KHM-40SAE-3314-16X	02070209	5000	306	91	38	117	99	12	46	157	130
	1-1/2" code 61	KHM-40F3-3314X-16X	02069236	3000	306	91	38	117	99	12	46	157	231
	1-1/2" code 62	KHM-40F6-3314X-16X	02073038	5000	306	91	38	117	99	12	46	157	281
DN 50 (2")	2" NPT	KHM-50NPT-3314-16X	02065778	5000	306	109	48	133	115	12	55	164	140
	SAE-32	KHM-50SAE-3314-16X	02078596	5000	306	109	48	133	115	12	55	164	140
	2" code 61	KHM-50F3-3314X-16X	02078597	3000	306	109	48	133	115	12	55	164	234
	2" code 62	KHM-50F6-3314X-16X	02072531	5000	306	109	48	133	115	12	55	164	315

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

Dimensions are in mm.

For information on stainless steel code 61 & 62 flanges, see page 151.

Model Codes containing selections listed in RED are non-standard items – Minimum quantities will apply – Contact HYDAC for information and availability