

# HYDAC High Pressure Ball Valves

## KHB & KHM Series 2-way Ball Valves with Split Flange Connections



**KHB Series**  
Block Housing



**KHM Series**  
Forged Housing

### Specifications

- 1/2" - 2" Full Port Design
- SAE Code 61 and 62 Split Flange Connections
- Carbon Steel Housing
- Block Housing - Sizes 16 - 25
- Forged Housing - Sizes 32 - 50
- Polyacetal Ball Seals (standard)
- FPM (Fluoroelastomer) O-Rings (standard)
- Operating Pressure to 5800 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 - 20 F3 - 1 1 1 4 X - 12X - L**

#### Housing Type

- KHB = Block Housing, Carbon Steel - Sizes 16-25
- KHM = Forged Housing, Carbon Steel - Sizes 32-50
- KHM = Forged Housing, Stainless Steel - Sizes 06 - 50 (see page 12 for details)

#### Nominal Sizes

Valve Size	Nominal Flange Size	Flange Dash Size
16	1/2"	-8
20	3/4"	-12
25	1"	-16
32	1-1/4"	-20
40	1-1/2"	-24
50	2"	-32

#### Connection Type

- SAE J518 Four bolt split flange type:
- F3 = Standard Pressure Series, Code 61
- F6 = High Pressure Series, Code 62

#### 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 N)
- 3 = PTFE Spindle Seals and FPM (fluoroelastomer) O-Rings (1500 psi max)
- 4 = FPM (fluoroelastomer) (standard)
- 5 = EPR

#### Split Flange Material

- X = Without Split Flanges (order split flanges separately see page 151)

#### Handle Codes

- 09X = Without Handle, Sizes 16-50
- 12X = Offset Aluminum, Sizes 16-25
- 16X = Offset Steel, Sizes 32-50

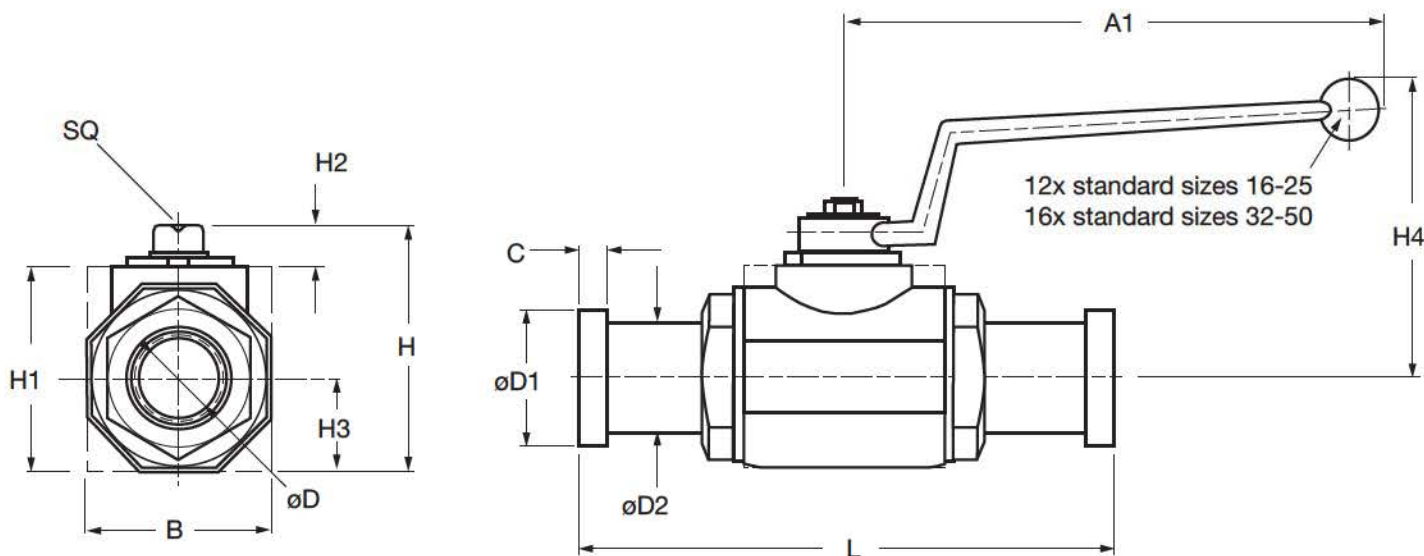
#### Locking Device Option

- 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



For dimensional information on flanges, see page 151

### SAE Code 61 [...F3]

Model	max. psi*	Size	A1	B	C	øD	øD1	øD2	H	H1	H2	H3	H4	L	SQ	Weight
KHB-16 F3	5000	1/2"	6.42 (163)	1.50 (38)	0.27 (6.8)	0.51 (13)	1.19 (30.2)	0.94 (24)	2.44 (62)	1.77 (45)	0.43 (11)	0.75 (19)	3.27 (83)	5.94 (151)	0.47 (12)	2.4 (1.1)
KHB-20 F3	5000	3/4"	7.20 (183)	1.89 (48)	0.27 (6.8)	0.75 (19)	1.50 (38.1)	1.24 (31.5)	2.95 (75)	2.24 (57)	0.43 (11)	0.96 (24.5)	3.62 (92)	6.69 (170)	0.55 (14)	4.0 (1.8)
KHB-25 F3	5000	1"	7.20 (183)	2.24 (57)	0.31 (8)	0.98 (25)	1.75 (44.45)	1.50 (38)	3.23 (82)	2.52 (64)	0.43 (11)	1.12 (28.5)	3.74 (95)	6.95 (176.5)	0.55 (14)	5.1 (2.3)
KHM-32 F3	4000	1-1/4"	12.01 (305)	2.95 (75)	0.31 (8)	1.18 (30)	2.00 (50.8)	1.69 (43)	4.06 (103)	3.35 (85)	0.47 (12)	1.48 (37.5)	5.94 (151)	7.54 (191.4)	0.67 (17)	9.0 (4.1)
KHM-40 F3	3000	1-1/2"	12.01 (305)	3.35 (85)	0.31 (8)	1.50 (38)	2.38 (60.35)	1.97 (50)	4.49 (114)	3.78 (96)	0.47 (12)	1.67 (42.5)	6.18 (157)	9.09 (231)	0.67 (17)	13.1 (5.9)
KHM-50 F3	3000	2"	12.01 (305)	4.13 (105)	0.38 (9.6)	1.89 (48)	2.81 (71.4)	2.44 (62)	5.18 (131.5)	4.43 (112.5)	0.47 (12)	2.07 (52.5)	6.46 (164)	9.21 (234)	0.67 (17)	19.2 (8.7)

### SAE Code 62 [...F6]

Model	max. psi*	Size	A1	B	C	øD	øD1	øD2	H	H1	H2	H3	H4	L	SQ	Weight
KHB-16 F6	5800	1/2"	6.41 (163)	1.50 (38)	0.31 (7.8)	0.51 (13)	1.25 (31.8)	0.94 (24)	2.44 (62)	1.77 (45)	0.43 (11)	0.75 (19)	3.27 (83)	5.94 (151)	0.47 (12)	2.4 (1.1)
KHB-20 F6	5000	3/4"	7.20 (183)	1.89 (48)	0.35 (8.8)	0.75 (19)	1.63 (41.3)	1.26 (32)	2.95 (75)	2.24 (57)	0.43 (11)	0.96 (24.5)	3.62 (92)	6.69 (170)	0.55 (14)	4.0 (1.8)
KHB-25 F6	5000	1"	7.20 (183)	2.24 (57)	0.37 (9.5)	0.98 (25)	1.87 (47.6)	1.50 (38)	3.23 (82)	2.52 (64)	0.43 (11)	1.12 (28.5)	3.72 (95)	7.81 (198.5)	0.55 (14)	5.4 (2.4)
KHM-32 F6	5000	1-1/4"	12.01 (305)	2.95 (75)	0.41 (10.3)	1.18 (30)	2.13 (54)	1.73 (44)	4.06 (103)	3.35 (85)	0.47 (12)	1.48 (37.5)	5.94 (151)	8.80 (223.4)	0.67 (17)	10.6 (4.8)
KHM-40 F6	5000	1-1/2"	12.01 (305)	3.35 (85)	0.50 (12.6)	1.50 (38)	2.50 (63.5)	2.01 (51)	4.49 (114)	3.78 (96)	0.47 (12)	1.67 (42.5)	6.18 (157)	11.06 (281)	0.67 (17)	15.4 (7.0)
KHM-50 F6	5000	2"	12.01 (305)	4.13 (105)	0.50 (12.6)	1.89 (48)	3.13 (79.4)	2.64 (67)	5.18 (131.5)	4.43 (112.5)	0.47 (12)	2.07 (52.5)	6.46 (164)	12.40 (315)	0.67 (17)	22.5 (10.2)

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.