

Ball Valves Brass

CHARACTERISTICS
GENERAL

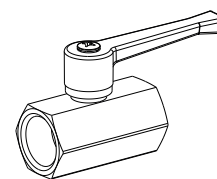
Constructional design	Ball valve with float-mounted precision ball				Ball and shaft one-piece
Application	Neutral gaseous or fluids				
Product name	2-way ball valve			3-way ball valve	
Product type	LKH-177/178	LKH-321/322/324	LKH-100	LKH-333/334	GKH-234/236
	GKH-175/176	GKH-321/322	GKH-100		OKH-234/236
Thread connector	G 1/4 - G 1/2	G 1/4 - G 4	RP 3/8 - RP 2	G 1/4 - G 2	G 1/4
Clear span (cs)	8 - 10	10 - 95	10 - 50	9.5 - 40.7	3.2 - 6
Temperature range	-20 °C to +140 °C	-10 °C to +180 °C	-10 °C to +110 °C	-10 °C to +180 °C	-10 °C to +130 °C
Body material	CW617N, chromium-plated	CW617N, outer nickel-plated		CW614N, nickel-plated	
Ball material	CW617N, chromium-plated	CW617N, chromium-plated			CW614N
Ball seal material	PTFE (Teflon)	PTFE (Teflon)		PTFE (Teflon)	
Shaft seal material	FKM	FKM			FKM
O-ring material	FKM				
Hand lever material	plastic	Steel, plastic-sheathed, red	Steel, plastic-sheathed, yellow	Steel, plastic-sheathed, red	-
Handle material	plastic	Aluminium, powder-coated, red	Aluminium, powder-coated, yellow	-	plastic
PNEUMATIC - HYDRAULIC					
Nominal pressure	10	40 / 32	1 (gas) / 25	50 / 40 / 32 / 25	10
Pressure range	Rough vacuum up to permitted excess operating pressure PB according to table				

2-Way Ball Valve - Small Series

 Price group **31** PN 10

Chromium-plated brass

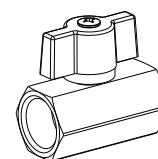
DN	CS	G	PN	Permitted excess operating pressure [bar] at temperature		Total length	Length inner thread	Type	Order number	Price
				90 °C	140 °C					
8	8	G 1/4	10	10	-	41.5	10	LKH-177-1/4	637502	o. r.
8	8	G 1/4	10	10	6	41.5	10	LKH-177-1/4-S	637504	o. r.
10	8	G 3/8	10	10	-	41.5	10	LKH-177-3/8	637507	o. r.
10	8	G 3/8	10	10	6	41.5	10	LKH-177-3/8-S	637509	o. r.
15	10	G 1/2	10	8	-	49	10.5	LKH-177-1/2	637512	o. r.
15	10	G 1/2	10	8	6	49	10.5	LKH-177-1/2-S	637514	o. r.

Illustration

2-Way Ball Valve - Small Series

 Price group **31** PN 10

Chromium-plated brass

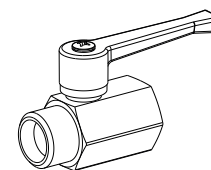
DN	CS	G	PN	Permitted excess operating pressure [bar] at temperature		Total length	Length inner thread	Type	Order number	Price
				90 °C	140 °C					
8	8	G 1/4	10	10	-	41.5	10	GKH-175-1/4	637503	o. r.
8	8	G 1/4	10	10	6	41.5	10	GKH-175-1/4-S	637505	o. r.
10	8	G 3/8	10	10	-	41.5	10	GKH-175-3/8	637508	o. r.
10	8	G 3/8	10	10	6	41.5	10	GKH-175-3/8-S	637510	o. r.
15	10	G 1/2	10	8	-	49	10.5	GKH-175-1/2	637513	o. r.
15	10	G 1/2	10	8	6	49	10.5	GKH-175-1/2-S	637515	o. r.

Illustration

2-Way Ball Valve - Small Series

 Price group **31** PN 10

Chromium-plated brass

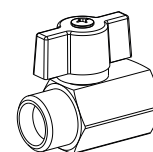
DN	CS	G	PN	Permitted excess operating pressure [bar] at temperature		Total length	Length outer thread	Length inner thread	Type	Order number	Price
				90 °C	140 °C						
8	8	G 1/4	10	10	-	41.5	9.5	10	LKH-178-1/4	637517	o. r.
8	8	G 1/4	10	10	6	41.5	9.5	10	LKH-178-1/4-S	637519	o. r.
10	8	G 3/8	10	10	-	41.5	9.5	10	LKH-178-3/8	637522	o. r.
10	8	G 3/8	10	10	6	41.5	9.5	10	LKH-178-3/8-S	637524	o. r.
15	10	G 1/2	10	8	-	49	13	10.5	LKH-178-1/2	637527	o. r.
15	10	G 1/2	10	8	6	49	13	10.5	LKH-178-1/2-S	637529	o. r.

Illustration

2-Way Ball Valve - Small Series

 Price group **31** PN 10

Chromium-plated brass

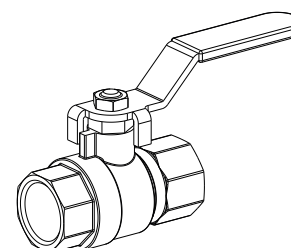
DN	CS	G	PN	Permitted excess operating pressure [bar] at temperature		Total length	Length outer thread	Length inner thread	Type	Order number	Price
				90 °C	140 °C						
8	8	G 1/4	10	10	-	41.5	9.5	10	GKH-176-1/4	637518	o. r.
8	8	G 1/4	10	10	6	41.5	9.5	10	GKH-176-1/4-S	637520	o. r.
10	8	G 3/8	10	10	-	41.5	9.5	10	GKH-176-3/8	637523	o. r.
10	8	G 3/8	10	10	6	41.5	9.5	10	GKH-176-3/8-S	637525	o. r.
15	10	G 1/2	10	8	-	49	13	10.5	GKH-176-1/2	637528	o. r.
15	10	G 1/2	10	8	6	49	13	10.5	GKH-176-1/2-S	637530	o. r.

Illustration

2-Way Ball Valve - Full Flow - however DN 65 to 100 slightly reduced

 Price group **31** PN 40/25

Nickel-plated brass

DN	CS	G	PN	Permitted excess operating pressure [bar] at temperature			Total length	Length inner thread	Type	Order number	Price
				90 °C	140 °C	180 °C					
8	10	G 1/4	40	36	22	12	45	10	LKH-321-1/4	637902	o. r.
10	10	G 3/8	40	36	22	12	45	10	LKH-321-3/8	637906	o. r.
15	15	G 1/2	40	36	22	12	63	12	LKH-321-1/2	637910	o. r.
20	20	G 3/4	40	29	18	10	71	16	LKH-321-3/4	637914	o. r.
25	25	G 1	40	29	18	10	83	18	LKH-321-1	637918	o. r.
32	32	G 1 1/4	32	23	16	8	92	20	LKH-321-1 1/4	637922	o. r.
40	40	G 1 1/2	32	19	12	6	104	21	LKH-321-1 1/2	637926	o. r.
50	50	G 2	32	19	12	6	124	24	LKH-321-2	637930	o. r.
65	61	G 2 1/2	25	12	8	4	141	24	LKH-324-2 1/2	638034	o. r.
80	74	G 3	25	12	8	4	160	26	LKH-324-3	638038	o. r.
100	95	G 4	25	12	8	4	196	30	LKH-324-4	638042	o. r.

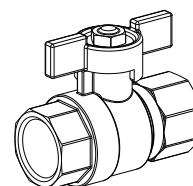
Illustration


2-Way Ball Valve

 Price group **31** PN 40

Nickel-plated brass

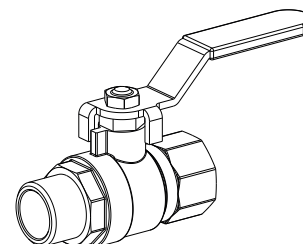
DN	CS	G	PN	Permitted excess operating pressure [bar] at temperature			Total length	Length outer thread	Length inner thread	Type	Order number	Price
				90 °C	140 °C	180 °C						
8	10	G 1/4	40	36	22	12	46	10	GKH-321-1/4	637903	o. r.	
10	10	G 3/8	40	36	22	12	45	10	GKH-321-3/8	637907	o. r.	
15	15	G 1/2	40	36	22	12	64	12	GKH-321-1/2	637911	o. r.	
20	20	G 3/4	40	29	18	10	72	16	GKH-321-3/4	637915	o. r.	
25	25	G 1	40	29	18	10	83	18	GKH-321-1	637919	o. r.	

Illustration

2-Way Ball Valve

 Price group **31** PN 40/32

Nickel-plated brass

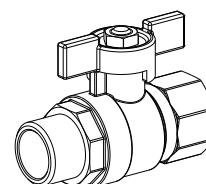
DN	CS	G	PN	Permitted excess operating pressure [bar] at temperature			Total length	Length outer thread	Length inner thread	Type	Order number	Price
				90 °C	140 °C	180 °C						
10	10	G 3/8	40	36	22	12	54	12	10	LKH-322-3/8	637956	o. r.
15	15	G 1/2	40	36	22	12	70	15	12	LKH-322-1/2	637960	o. r.
20	20	G 3/4	40	29	18	10	80	16	16	LKH-322-3/4	637964	o. r.
25	25	G 1	40	29	18	10	92	20.5	18	LKH-322-1	637968	o. r.
32	32	G 1 1/4	32	23	16	8	102	20.5	20.5	LKH-322-1 1/4	637972	o. r.
40	40	G 1 1/2	32	19	12	6	117	21.5	21	LKH-322-1 1/2	637976	o. r.
50	50	G 2	32	19	12	6	136	23	24	LKH-322-2	637980	o. r.

Illustration

2-Way Ball Valve

 Price group **31** PN 40

Nickel-plated brass

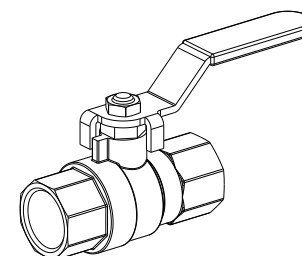
DN	CS	G	PN	Permitted excess operating pressure [bar] at temperature			Total length	Length outer thread	Length inner thread	Type	Order number	Price
				90 °C	140 °C	180 °C						
10	10	G 3/8	40	36	22	12	54	12	10	GKH-322-3/8	637957	o. r.
15	15	G 1/2	40	36	22	12	70	15	12	GKH-322-1/2	637961	o. r.
20	20	G 3/4	40	29	18	10	80	16	16	GKH-322-3/4	637965	o. r.
25	25	G 1	40	29	18	10	92	20.5	18	GKH-322-1	637969	o. r.

Illustration

2-Way Ball Valve - DIN-DVGW Reg. No. 92.01 e 770 (full flow)

 Price group **31** PN 20 PN with gas: Also gases according to DVGW worksheet G260/1 nominal pressure level PN1

Nickel-plated brass

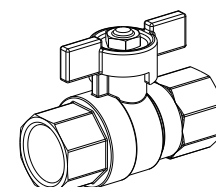
DN	CS	G	PN	Permitted excess operating pressure [bar] at temperature		Total length	Length inner thread	Type	Order number	Price
				80 °C	110 °C					
10	10	Rp 3/8	1 / 20	18	16	60	14	LKH-100-3/8	637806	o. r.
15	15	Rp 1/2	1 / 20	18	16	75	18	LKH-100-1/2	637811	o. r.
20	20	Rp 3/4	1 / 20	18	16	80	18	LKH-100-3/4	637814	o. r.
25	25	Rp 1	1 / 20	18	16	90	19	LKH-100-1	637818	o. r.
32	32	Rp 1 1/4	1 / 20	18	16	110	22	LKH-100-1 1/4	637822	o. r.
40	40	Rp 1 1/2	1 / 20	18	16	120	25	LKH-100-1 1/2	637826	o. r.
50	50	Rp 2	1 / 20	18	16	140	25	LKH-100-2	637830	o. r.

Illustration

2-Way Ball Valve, DIN-DVGW Reg. No. 92.01 e 770 (full flow)

 Price group **31** PN 20 PN with gas: Also gases according to DVGW worksheet G260/1 Nominal pressure level PN1

Nickel-plated brass

DN	CS	G	PN	Permitted excess operating pressure [bar] at temperature		Total length	Length inner thread	Type	Order number	Price
				80 °C	110 °C					
10	10	Rp 3/8	1 / 20	18	16	60	14	GKH-100-3/8	637807	o. r.
15	15	Rp 1/2	1 / 20	18	16	75	18	GKH-100-1/2	637812	o. r.
20	20	Rp 3/4	1 / 20	18	16	80	18	GKH-100-3/4	637815	o. r.
25	25	Rp 1	1 / 20	18	16	90	19	GKH-100-1	637819	o. r.

Illustration


3-Way Ball Valve with T-bore - Reduced Flow

 Price group **33**

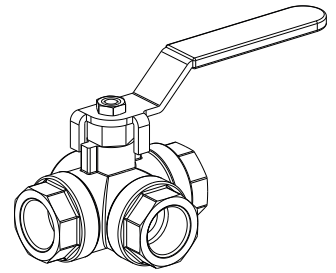
PN 32/25

Ball bore: T-bore



Nickel-plated brass

DN	CS	G	PN	Permitted excess operating pressure [bar] at temperature			Total length	Length inner thread	Type	Order number	Price
				80 °C	130 °C	180 °C					
8	10	G 1/4	32	32	22	10	74	12	LKH-333-1/4	639102	o. r.
10	9.5	G 3/8	32	32	22	10	74	13	LKH-333-3/8	639106	o. r.
15	12	G 1/2	32	32	22	10	80	14	LKH-333-1/2	639110	o. r.
20	15.5	G 3/4	32	32	22	10	90	16	LKH-333-3/4	639114	o. r.
25	20	G 1	32	32	22	10	106	20	LKH-333-1	639118	o. r.
32	25	G 1 1/4	25	25	16	7	115	21	LKH-333-1 1/4	639122	o. r.
40	32	G 1 1/2	25	25	16	7	138	23	LKH-333-1 1/2	639126	o. r.
50	40	G 2	25	25	16	7	161	26	LKH-333-2	639130	o. r.

Illustration

3-Way Ball Valve with Side T-bore - Reduced Flow

 Price group **33**

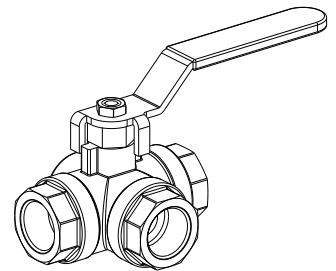
PN 32/25

Ball bore: Side T-bore



Nickel-plated brass

DN	CS	G	PN	Permitted excess operating pressure [bar] at temperature			Total length	Length inner thread	Type	Order number	Price
				80 °C	130 °C	180 °C					
8	9.5	G 1/4	32	32	22	10	74	12	LKH-334-1/4	639152	o. r.
10	9.5	G 3/8	32	32	22	10	74	13	LKH-334-3/8	639156	o. r.
15	12	G 1/2	32	32	22	10	80	13	LKH-334-1/2	639160	o. r.
20	15.5	G 3/4	32	32	22	10	90	16	LKH-334-3/4	639164	o. r.
25	20	G 1	32	32	22	10	106	20	LKH-334-1	639168	o. r.
32	25	G 1 1/4	25	25	16	7	117	21.5	LKH-334-1 1/4	639172	o. r.
40	32	G 1 1/2	25	25	16	7	138	23	LKH-334-1 1/2	639176	o. r.
50	40.7	G 2	25	25	16	7	161	25	LKH-334-2	639180	o. r.

Illustration

3-Way Small Ball Valve

 Price group **32**

PN 10

 $T_{min} -10\text{ °C}$
 $T_{max} +130\text{ °C}$

Nickel-plated brass

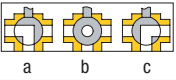
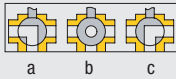
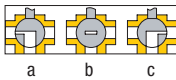
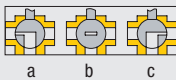
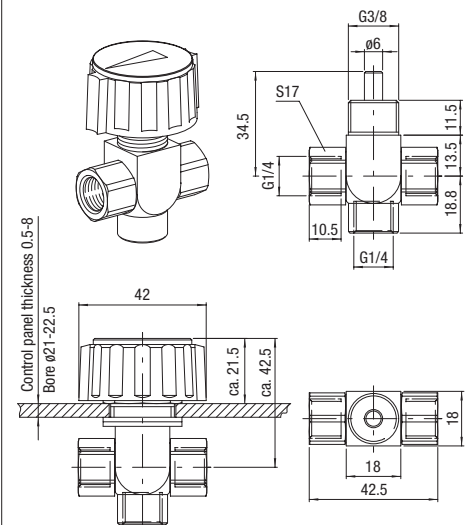
Version	DN	CS	G	PN PB	Type	Order number	Price
3/3-way ball valve with Side T-bore, without toggle and accessories  Position (locking)	6	5	G 1/4	10	OKH-234-M60-1/4F	638902	o. r.
3/3-way ball valve with Side T-bore, with toggle and accessories  Position (locking)	6	6	G 1/4	10	GKH-234-M60-1/4F	638910	o. r.
3/3-way dispensing ball valve, without toggle and accessories  Position (locking)	6	3.2	G 1/4	10	OKH-236-M32-1/4F	638922	o. r.
3/3-way dispensing ball valve, with toggle and accessories  Position (locking)	6	3.2	G 1/4	10	GKH-236-M32-1/4F	638930	o. r.

Illustration

3-Way Small Ball Valve Accessories

 Price group **32**

PN 10

Product name	Scope of delivery for Type GKH	Type	Order number	Price
Toggle	1 piece	ZKH-130-G-6x42	617517	o. r.
Cover (black)	1 piece	ZKH-130-A-black	617518	o. r.
Cover (red)		ZKH-130-A-red	617519	o. r.
Cover (blue)		ZKH-130-A-blue	617520	o. r.
Cover (yellow)		ZKH-130-A-yellow	617521	o. r.
Reducer nipple	1 piece	253M-1/2-3/8-S2	250900	o. r.
Sealing ring	5 pieces	265A-1/2x1.5	252886	o. r.

Illustration
