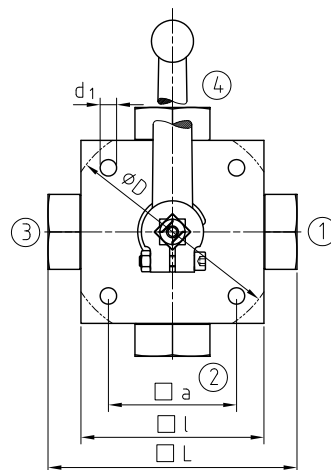
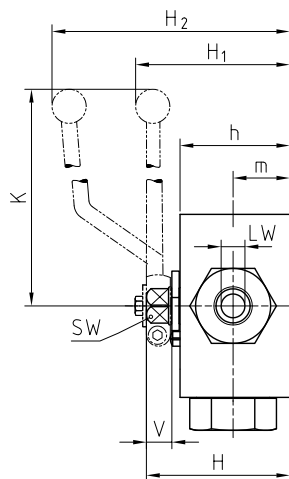
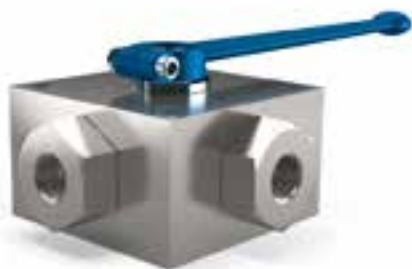


Multiway ball valve Steel

4KH



AVAILABLE SIZES

DN4 - DN25 (1/8" to 1")

CONNECTIONS

DIN ISO 228 Female thread, ANSI B1.20.1 NPT Female thread, DIN 2353/ISO 8434-1 Light / Heavy series, SAE J 514/ISO/DIS11926-1 Female thread, others on request

ACCESSORIES ON REQUEST

- Locking devices page 230 - 233
- Actuators 228 - 229
- Mounting holes on request
- Position switches on request
- Combinations 200 - 203
- Detent 239

MATERIAL CODE DESCRIPTION

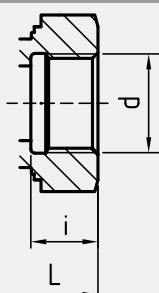
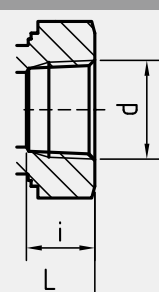
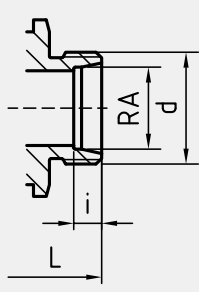
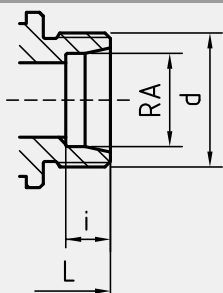
Materials	112A	112A	1128	1128
Body	Steel	Steel	Steel	Steel
Trunnion ball	Steel	Steel	Steel	Steel
Ball seats	POM	POM	POM	POM
O-rings	NBR	NBR	FPM	FPM
Tmin / Tmax	-20°C / 100°C	-20°C / 100°C	-20°C / 100°C	-20°C / 100°C
Porting pattern	T=SB13	X=SB14	T=SB13	X=SB14

GENERAL DIMENSIONS

Type	LW _{LT}	LW _X	D	a	l	d ₁	H	h	m	K	V	SW	H ₁	H ₂	Lever
4KH-DN4	5	4	-	55	70	6,5	58	40	22	160	14	12	-	101	Al
4KH-DN6	5	4	-	55	70	6,5	58	40	22	160	14	12	-	101	Al
4KH-DN8	8	7	-	65	80	6,5	68	50	27	200	14	14	72	-	Zn
4KH-DN10	8	7	-	65	80	6,5	68	50	27	200	14	14	72	-	Zn
4KH-DN13	13	10	-	80	100	9	78	60	31	200	14	14	82	-	Zn
4KH-DN16	13	10	-	80	100	9	78	60	31	200	14	14	82	-	Zn
4KH-DN20	18	14	138	85	113	8,5	88	67	36,5	320	16,5	17	96	-	Al
4KH-DN25	23	17	138	85	119	8,5	103	82	47,5	320	16,5	17	112	-	Al
4KH-DN25/32	23	17	138	85	119	8,5	103	82	47,5	320	16,5	17	112	-	Al
4KH-DN25/40	23	17	138	85	119	8,5	103	82	47,5	320	16,5	17	112	-	Al

Multiway ball valve Steel

4KH

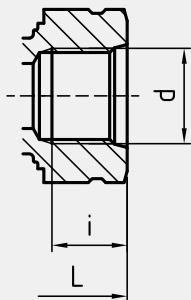
CONNECTION TYPE	DIMENSIONS					ORDER CODE PER MATERIAL COMBINATION					
DIN ISO 228 FEMALE THREAD	Type	L	i	d	Weight [Kg]	PN [bar]	112A T=SB13	112A X=SB14	1128 T=SB13	1128 X=SB14	
	4KH-DN4-G1/8	100	10	G1/8	1,60	500	02257	02258*	25896	25829*	
	4KH-DN6-G1/4	100	14	G1/4	1,60	500	20455	20445*	25897	25830*	
	4KH-DN10-G3/8	115	14	G3/8	2,80	500	20447	20448*	25898	25831*	
	4KH-DN13-G1/2	136	16,3	G1/2	4,90	400	20450	20451*	25899	25832*	
	4KH-DN16-G5/8	139	18	G5/8	4,90	400	02662	02663*	03180	03189*	
	4KH-DN20-G3/4	154	18	G3/4	6,80	315	02233	23441*	25900	03190*	
	4KH-DN25-G1	172	20	G1	8,50	315	02200	20452*	25901	03191*	
	4KH-DN25/32-G1 1/4	180	22	G1 1/4	8,80	315	02206	30658	25902	03192	
	4KH-DN25/40-G1 1/2	180	24	G1 1/2	8,80	250	02212	02213	25903	25836	
ANSI B1.20.1 NPT FEMALE THREAD	Type	L	i	d	Weight [Kg]	PN [bar]	112A T=SB13	112A X=SB14	1128 T=SB13	1128 X=SB14	
	4KH-DN4-1/8"NPT	100	10,5	1/8"NPT	1,60	500	37525	33216	25904	25837	
	4KH-DN6-1/4"NPT	100	13,7	1/4"NPT	1,60	500	19327	17859	25905	15741	
	4KH-DN10-3/8"NPT	115	13,5	3/8"NPT	2,80	500	19525	19531	25906	25839	
	4KH-DN13-1/2"NPT	160	17	1/2"NPT	4,90	400	19526	19532	25907	25840	
	4KH-DN20-3/4"NPT	164	18,3	3/4"NPT	6,80	315	14024	13515	25908	25841	
	4KH-DN25-1"NPT	186	21,6	1"NPT	8,50	315	19528	19534	25909	25842	
	4KH-DN25/32-1 1/4"NPT	186	22,1	1 1/4"NPT	8,80	315	19529	19535	25910	25843	
	4KH-DN25/40-1 1/2"NPT	186	22,1	1 1/2"NPT	8,80	250	37533	33217	25911	25844	
DIN 2353 / ISO 8434-1 LIGHT SERIES	Type	RA	L	i	d	Weight [Kg]	PN [bar]	112A T=SB13	112A X=SB14	1128 T=SB13	1128 X=SB14
	4KH-DN4-6L	6	105	7	M 12x1,5	1,60	500	02218	02219*	25880	25813*
	4KH-DN6-8L	8	105	7	M 14x1,5	1,80	500	37369	02336*	25881	25814*
	4KH-DN8-10L	10	114	7	M 16x1,5	2,60	500	19856	02602*	25882	25815*
	4KH-DN10-12L	12	114	7	M 18x1,5	2,60	500	02613	20385*	25883	25816*
	4KH-DN13-15L	15	137	7	M 22x1,5	4,70	400	02631	02632*	25884	25817*
	4KH-DN16-18L	18	137	7,5	M 26x1,5	4,70	400	02650	02651*	25885	25818*
	4KH-DN20-22L	22	152	7,5	M 30x2	6,60	315	02314	02315*	25886	25819
	4KH-DN25-28L	28	166	7,5	M 36x2	8,00	315	31967	02321*	25887	25820*
	4KH-DN25/32-35L	35	170	10,5	M 45x2	8,12	315	02858	02859*	03148	03157*
DIN 2353 / ISO 8434-1 HEAVY SERIES	Type	RA	L	i	d	Weight [Kg]	PN [bar]	112A T=SB13	112A X=SB14	1128 T=SB13	1128 X=SB14
	4KH-DN4-8S	8	105	7	M 16x1,5	1,60	500	02306	02305*	25888	25821*
	4KH-DN6-10S	10	105	7,5	M 18x1,5	1,60	500	37434	16410*	25889	25822*
	4KH-DN8-12S	12	116	7,5	M 20x1,5	2,60	500	23057	02608*	25890	25823*
	4KH-DN10-14S	14	120	8	M 22x1,5	2,60	500	02619	02620*	25891	25824*
	4KH-DN13-16S	16	141	8,5	M 24x1,5	4,70	400	02637	02638*	25892	36440*
	4KH-DN16-20S	20	145	10,5	M 30x2	4,70	400	02656	02657*	25893	25826*
	4KH-DN20-25S	25	160	12	M 36x2	6,60	315	02269	31966*	25894	25827*
	4KH-DN25-30S	30	176	13,5	M 42x2	8,20	315	02263	02264*	25895	25828*
	4KH-DN25/32-38S	38	180	16	M 52x2	8,30	315	02854	02855*	03112	03121*

Please note the pressure ratings of the tube connections!

*Article usually in stock.

CONNECTION TYPE

SAE J514/ISO/DIS11926-1
FEMALE THREAD



DIMENSIONS

Type	L	i	d	Weight [Kg]
4KH-DN6-7/16" UNF	100	12	7/16"-20 UNF	1,60
4KH-DN10-9/16" UNF	115	13	9/16"-18 UNF	2,80
4KH-DN13-3/4" UNF	144	15	3/4"-16 UNF	4,90
4KH-DN20-1 1/16" UN	164	20	1 1/16"-12 UN	6,80
4KH-DN25-1 5/16" UN	180	20	1 5/16"-12 UN	8,50

ORDER CODE PER MATERIAL COMBINATION

PN [bar]	112A T=SB13	112A X=SB14	1128 T=SB13	1128 X=SB14
500	38189	38190	39171	39172
500	38191	38192	39173	39174
400	38193	38194	39175	22359
315	38195	38196	39176	30547
315	38197	38198	39177	22342

Please note the pressure ratings of the tube connections!
Due to material availability the material code of the steel valves may vary from 112A (or 1128). DN20-25=812A (or 8128). Material suitability for the application does not differ from 112A (or 1128).

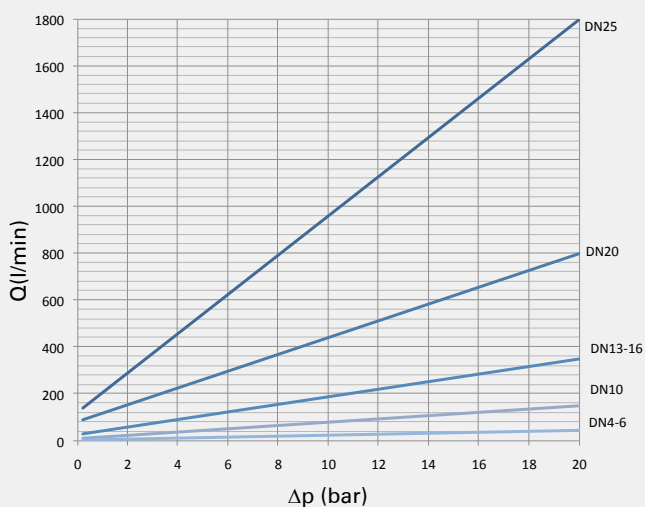
*Article usually in stock.

PORTING PATTERNS



Further porting patterns page 274 to 279

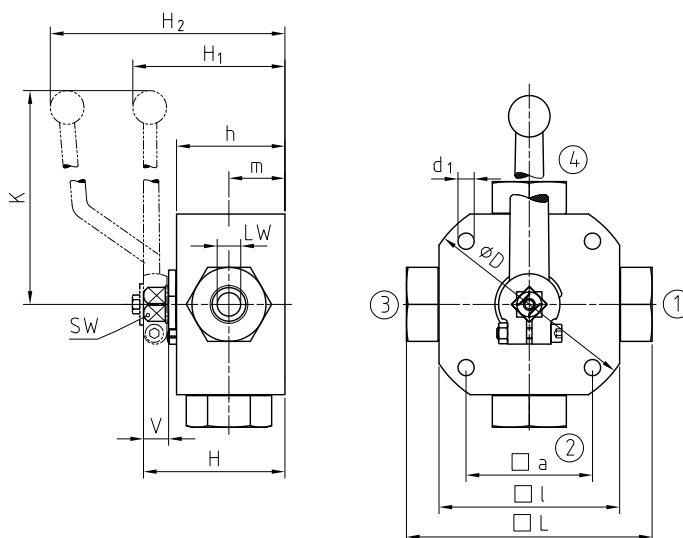
FLOW CHARACTERISTICS 4KH-X/T



The flow values are measured with usage of hydraulic oil (spissitude 880 kg/m³) and the kinematic viscosity of 35 mm²/s.

Multiway ball valve Stainless Steel

4KH



AVAILABLE SIZES

DN4 - DN25 (1/8" to 1")

CONNECTIONS

DIN ISO 228 Female thread, ANSI B1.20.1 NPT Female thread, DIN 2353/ISO 8434-1 Light / Heavy series, SAE J 514/ISO/DIS11926-1 Female thread, others on request

ACCESSORIES ON REQUEST

- Locking devices page 230 - 233
- Actuators 228 - 229
- Mounting holes on request
- Position switches on request
- Combinations 200 - 203
- Detent 239

MATERIAL CODE DESCRIPTION

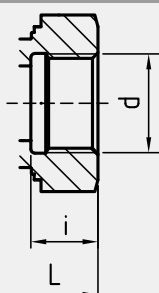
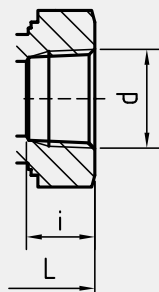
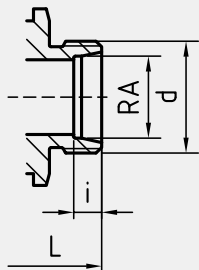
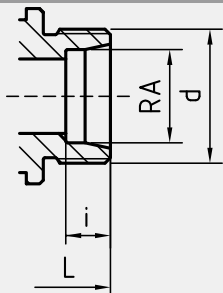
Materials	442A	442A	4428	4428
Body	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Trunnion ball	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Ball seats	POM	POM	POM	POM
O-rings	NBR	NBR	FPM	FPM
Tmin / Tmax	-30°C / 100°C	-30°C / 100°C	-20°C / 100°C	-20°C / 100°C
Porting pattern	T=SB13	X=SB14	T=SB13	X=SB14

GENERAL DIMENSIONS

Type	LW _{LT}	LW _X	D	a	l	d ₁	H	h	m	K	V	SW	H ₁	H ₂	Lever
4KH-DN4	5	4	75	40	70	6,5	58	40	22	160	14	12	-	101	Al
4KH-DN6	5	4	75	40	70	6,5	58	40	22	160	14	12	-	101	Al
4KH-DN8	8	7	90	45	80	6,5	68	50	27	200	14	14	72	-	Zn
4KH-DN10	8	7	90	45	80	6,5	68	50	27	200	14	14	72	-	Zn
4KH-DN13	13	10	110	60	100	9	78	60	31	200	14	14	82	-	Zn
4KH-DN16	13	10	110	60	100	9	78	60	31	200	14	14	82	-	Zn
4KH-DN20	18	14	138	85	113	8,5	88	67	36,5	320	16,5	17	96	-	Al
4KH-DN25	23	17	138	85	119	8,5	103	82	47,5	320	16,5	17	112	-	Al
4KH-DN25/32	23	17	138	85	119	8,5	103	82	47,5	320	16,5	17	112	-	Al
4KH-DN25/40	23	17	138	85	119	8,5	103	82	47,5	320	16,5	17	112	-	Al

Multiway ball valve Stainless Steel

4KH

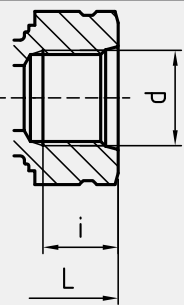
CONNECTION TYPE	DIMENSIONS					ORDER CODE PER MATERIAL COMBINATION					
DIN ISO 228 FEMALE THREAD	Type	L	i	d	Weight [Kg]	PN [bar]	442A T=SB13	442A X=SB14	4428 T=SB13	4428 X=SB14	
	4KH-DN4-G1/8	100	10	G1/8	1,60	500	37443	37444	39144	39145	
	4KH-DN6-G1/4	100	14	G1/4	1,60	500	37446	20172	39146	31150	
	4KH-DN10-G3/8	115	14	G3/8	2,80	500	37509	09823	39147	35755	
	4KH-DN13-G1/2	136	16,3	G1/2	4,90	400	36026	21366	39148	26611	
	4KH-DN16-G5/8	139	18	G5/8	4,90	400	37512	37513	39149	39151	
	4KH-DN20-G3/4	154	18	G3/4	6,80	315	37515	35477	39150	28850	
	4KH-DN25-G1	172	20	G1	8,50	315	10212	37521	39152	39153	
	4KH-DN25/32-G1 1/4	180	22	G1 1/4	8,80	315	37519	37522	39154	39155	
	4KH-DN25/40-G1 1/2	180	24	G1 1/2	8,80	250	37520	37523	39156	39157	
ANSI B1.20.1 NPT FEMALE THREAD	Type	L	i	d	Weight [Kg]	PN [bar]	442A T=SB13	442A X=SB14	4428 T=SB13	4428 X=SB14	
	4KH-DN4-1/8"NPT	100	10,5	1/8"NPT	1,60	500	38115	38116	39158	39159	
	4KH-DN6-1/4"NPT	100	13,7	1/4"NPT	1,60	500	38117	32668	39160	32428	
	4KH-DN10-3/8"NPT	115	13,5	3/8"NPT	2,80	500	38118	38119	39161	32499	
	4KH-DN13-1/2"NPT	160	17	1/2"NPT	4,90	400	38120	32185	39162	39163	
	4KH-DN20-3/4"NPT	164	18,3	3/4"NPT	6,80	315	38121	38122	39164	34083	
	4KH-DN25-1"NPT	186	21,6	1"NPT	8,50	315	38123	38126	39165	39166	
	4KH-DN25/32-1 1/4"NPT	186	22,1	1 1/4 "NPT	8,80	315	38124	32310	39167	39168	
	4KH-DN25/40-1 1/2"NPT	186	22,1	1 1/2"NPT	8,80	250	38125	38127	39169	39170	
DIN 2353 / ISO 8434-1 LIGHT SERIES	Type	RA	L	i	d	Weight [Kg]	PN [bar]	442A T=SB13	442A X=SB14	4428 T=SB13	4428 X=SB14
	4KH-DN4-6L	6	105	7	M 12x1,5	1,60	500	37379	37380	39113	39114
	4KH-DN6-8L	8	105	7	M 14x1,5	1,80	500	37382	37383	39115	39116
	4KH-DN8-10L	10	114	7	M 16x1,5	2,60	500	37385	37386	39117	39118
	4KH-DN10-12L	12	114	7	M 18x1,5	2,60	500	37388	37389	39119	39120
	4KH-DN13-15L	15	137	7	M 22x1,5	4,70	400	37391	37392	39121	39122
	4KH-DN16-18L	18	137	7,5	M 26x1,5	4,70	400	37394	37395	39123	39124
	4KH-DN20-22L	22	152	7,5	M 30x2	6,60	315	37397	37398	39125	39126
	4KH-DN25-28L	28	166	7,5	M 36x2	8,00	315	37400	37401	39127	39128
	4KH-DN25/32-35L	35	170	10,5	M 45x2	8,12	315	41950	41951	41952	41953
DIN 2353 / ISO 8434-1 HEAVY SERIES	Type	RA	L	i	d	Weight [Kg]	PN [bar]	442A T=SB13	442A X=SB14	4428 T=SB13	4428 X=SB14
	4KH-DN4-8S	8	105	7	M 16x1,5	1,60	500	37414	37415	39129	39130
	4KH-DN6-10S	10	105	7,5	M 18x1,5	1,60	500	37417	37418	39131	39132
	4KH-DN8-12S	12	116	7,5	M 20x1,5	2,60	500	37420	19830	39133	39134
	4KH-DN10-14S	14	120	8	M 22x1,5	2,60	500	37422	37423	39135	39136
	4KH-DN13-16S	16	141	8,5	M 24x1,5	4,70	400	37425	37426	39137	26186
	4KH-DN16-20S	20	145	10,5	M 30x2	4,70	400	37428	22234	39138	39139
	4KH-DN20-25S	25	160	12	M 36x2	6,60	315	37430	37431	39140	39141
	4KH-DN25-30S	30	176	13,5	M 42x2	8,20	315	37433	37432	39142	39143
	4KH-DN25/32-38S	38	180	16	M 52x2	8,30	315	41954	41955	41956	41957

Please note the pressure ratings of the tube connections!

*Article usually in stock.

Multiway ball valve Stainless Steel

4KH

CONNECTION TYPE	DIMENSIONS					ORDER CODE PER MATERIAL COMBINATION				
SAE J514/ISO/DIS11926-1 FEMALE THREAD	Type	L	i	d	Weight [Kg]	PN [bar]	442A T=SB13	442A X=SB14	4428 T=SB13	4428 X=SB14
	4KH-DN6-7/16" UNF	100	12	7/16"-20 UNF	1,60	500	38199	38200	39178	39179
	4KH-DN10-9/16" UNF	115	13	9/16"-18 UNF	2,80	500	38201	38202	39180	39181
	4KH-DN13-3/4" UNF	144	15	3/4"-16 UNF	4,90	400	38203	38204	39182	39183
	4KH-DN20-1 1/16" UN	164	20	1 1/16"-12 UN	6,80	315	38205	38206	39184	39185
	4KH-DN25-1 5/16" UN	180	20	1 5/16"-12 UN	8,50	315	38207	38208	39186	39187

Please note the pressure ratings of the tube connections!

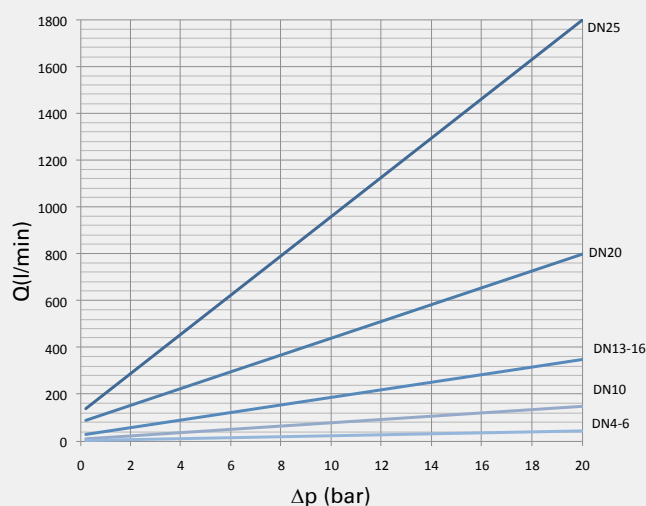
*Article usually in stock.

PORTING PATTERNS



Further porting patterns page 274 to 279

FLOW CHARACTERISTICS 4KH-X/T



The flow values are measured with usage of hydraulic oil (spissitude 880 kg/m³) and the kinematic viscosity of 35 mm²/s.

