



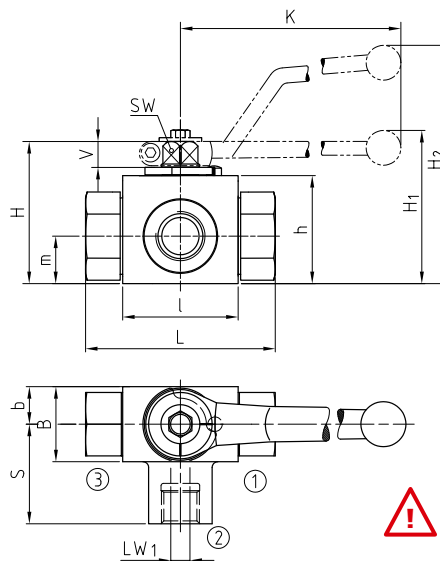
1945 - 2020



MHA ZENTGRAF
FlowControlTechnology



CATALOG



! Pressure inlet only from center port (port 2)!

AVAILABLE SIZES

DN4 - DN50 (1/8" to 2")

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

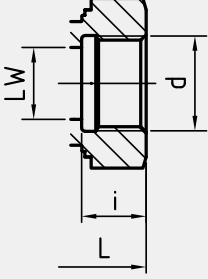
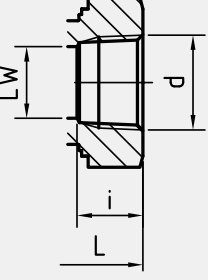
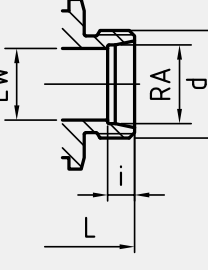
- Locking devices page 230 - 233
- Actuators 228 - 229
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- Position switches 236 - 237
- Combinations 198 - 199
- Detent on request

MATERIAL CODE DESCRIPTION

Materials	112A	112A	1128	1128
Body	Steel	Steel	Steel	Steel
Ball	Steel	Steel	Steel	Steel
Stem	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	L=SB50	T=SB51	L=SB50	T=SB51

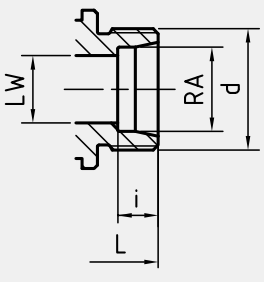
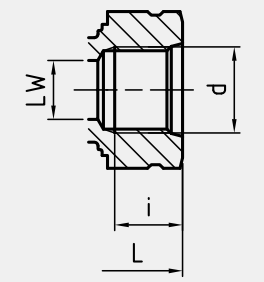
GENERAL DIMENSIONS

Type	l	b	B	H	h	m	V	SW	K	H ₁	H ₂	Lever
BK3-DN4	40	13	29	47	33	13,5	11	9	115	-	82	Zn
BK3-DN6	40	13	29	47	33	13,5	11	9	115	-	82	Zn
BK3-DN8	40	13	29	47	33	13,5	11	9	115	-	82	Zn
BK3-DN10	43	16	35	52	38	17,5	11	9	115	-	86	Zn
BK3-DN13	48	17,5	38	54	40	19	11	9	115	-	89	Zn
BK3-DN20	62	24,5	52	75	57	24,5	14	14	200	79	-	Zn
BK3-DN25	66	29	61	83	65	29,5	14	14	200	87	-	Zn
BK3-DN25/32	66	29	61	83	65	29,5	14	14	200	87	-	Zn
BK3-DN32	81	39	-	106	84,5	39	16,5	17	320	115	-	Al
BK3-DN40	104	53	-	127	106	53	16,5	17	320	136	-	Al
BK3-DN50	118	58	-	137	116	58	16,5	17	320	146	-	Al

CONNECTION TYPE	DIMENSIONS								ORDER CODE PER MATERIAL COMBINATION						
	Type	LW	L	S	LW ₁	i	d	Weight [Kg]	PN [bar]	112A L=SB50	112A T=SB51	1128 L=SB50	1128 T=SB51		
DIN ISO 228 FEMALE THREAD 	BK3-DN4-G1/8	5	69	34,5	4	10	G1/8	0,40	500	02347*	02401*	03236*	03247*		
	BK3-DN6-G1/4	6	69	34,5	6	14	G1/4	0,46	500	02849*	02408*	03237*	03248*		
	BK3-DN10-G3/8	10	72	36	10	14	G3/8	0,60	500	02398*	02413*	03238*	03249*		
	BK3-DN13-G1/2	13	83	41,5	13	16,3	G1/2	0,70	500	02429*	02430*	03239*	03250*		
	BK3-DN13-G5/8	13	83	41,5	13	16	G5/8	0,70	500	02850*	02851*	03240*	03251*		
	BK3-DN20-G3/4	20	95	47,5	20	18	G3/4	1,80	315	02708*	02770*	03241*	03252*		
	BK3-DN25-G1	25	113	56,5	25	20	G1	2,40	315	02711*	02773*	03242*	03253*		
	BK3-DN25/32-G1 1/4	25	120	57	25	22	G1 1/4	2,64	315	02714*	02776*	03243*	03254*		
	BK3-DN32-G1 1/4	30	111	55	30	22	G 1 1/4	4,80	350	32154*	32685*	33571*	38015*		
	BK3-DN40-G1 1/2	38	130	65	38	24	G 1 1/2	8,90	350	31980*	32038*	36033*	38016*		
	BK3-DN50-G2	48	150	75	48	26	G2	12,40	350	38005*	38014*	36034*	38017*		
	ANSI B1.20.1 NPT FEMALE THREAD 	BK3-DN4-1/8" NPT	5	69	34,5	4	10,5	1/8" NPT	0,40	500	40221*	40222*	15710*	40223*	
BK3-DN6-1/4" NPT		6	69	34,5	6	13,7	1/4" NPT	0,46	500	13221*	38049*	11333*	25912*		
BK3-DN10-3/8" NPT		10	72	36	10	13,5	3/8" NPT	0,60	500	41291*	38050*	11607*	25913*		
BK3-DN13-1/2" NPT		13	83	41,5	13	17	1/2" NPT	0,70	500	41292*	17198*	11608*	25914*		
BK3-DN20-3/4" NPT		20	95	47,5	20	18,3	3/4" NPT	1,80	315	15425*	38051*	11609*	25915*		
BK3-DN25-1" NPT		25	113	56,5	25	21,6	1" NPT	2,40	315	15426*	22926*	11610*	25916*		
BK3-DN25/32-1 1/4" NPT		25	120	57,5	25	22,1	1 1/4" NPT	2,64	315	38030*	36499*	38032*	25917*		
BK3-DN32-1 1/4" NPT		30	120	60	30	22,1	1 1/4" NPT	5,24	350	35517*	38052*	36538*	38055*		
BK3-DN40-1 1/2" NPT		38	140	70	38	22,1	1 1/2" NPT	10,00	350	38031*	38053*	38033*	38056*		
BK3-DN50-2" NPT		48	150	75	48	30,2	2" NPT	12,20	350	35519*	38054*	38034*	38057*		
DIN 2353 / ISO 8434-1 LIGHT SERIES 		BK3-DN4-6L	5	6	67	33,5	4	7	M 12x1,5	0,30	500	02349*	02403*	03214*	03225*
		BK3-DN6-8L	6	8	67	33,5	6	7	M 14x1,5	0,40	500	02348*	02402*	03215*	03226*
	BK3-DN8-10L	8	10	74	34,5	8	7	M 16x1,5	0,40	500	02396*	02409*	03216*	03227*	
	BK3-DN10-12L	10	12	74	36,5	10	7	M 18x1,5	0,50	500	02416*	02417*	36116*	03228*	
	BK3-DN13-15L	13	15	82	41	13	7	M 22x1,5	0,65	500	02425*	02426*	03218*	03229*	
	BK3-DN13-18L	13	18	82	41,5	13	7,5	M 26x1,5	0,69	500	02847*	02848*	03219*	03230*	
	BK3-DN20-22L	20	22	101	48	20	7,5	M 30x2	1,50	315	02706*	02768*	03220*	03231*	
	BK3-DN25-28L	25	28	108	54	25	7,5	M 36x2	2,10	315	02709*	02771*	03221*	03232*	
	BK3-DN25/32-35L	25	35	112	56	25	10,5	M 45x2	2,50	315	02712*	02774*	03222*	03233*	

Please note the pressure ratings of the tube connections!

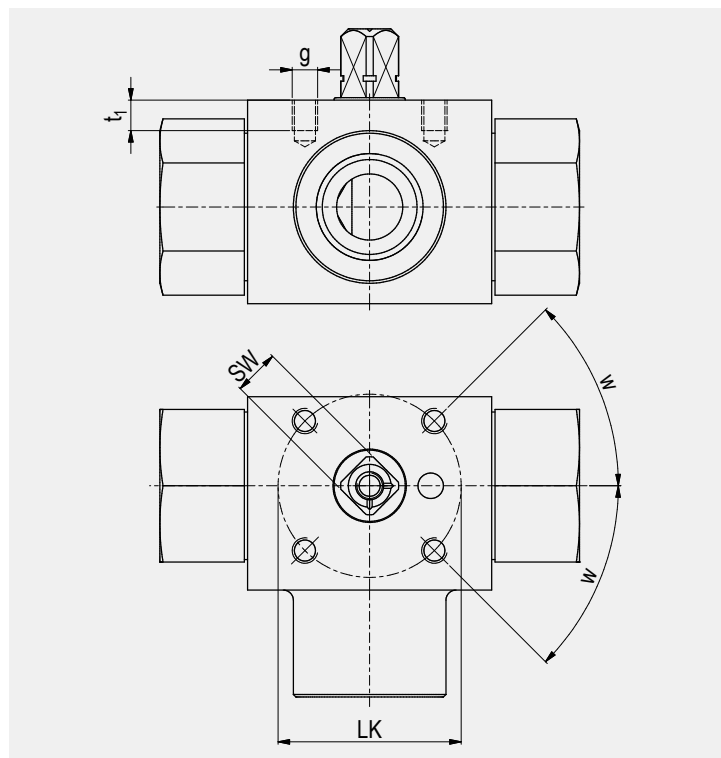
*Article usually in stock.

CONNECTION TYPE	DIMENSIONS										ORDER CODE PER MATERIAL COMBINATION				
	Type	LW	RA	L	S	LW ₁	i	d	Weight [Kg]	PN [bar]	112A L=SB50	112A T=SB51	1128 L=SB50	1128 T=SB51	
 DIN 2353 / ISO 8434-1 HEAVY SERIES	BK3-DN4-8S	5	8	73	34,5	4	7	M 16x1,5	0,42	500	02350*	02404*	03194*	03204*	
	BK3-DN6-10S	6	10	73	34,5	6	7,5	M 18x1,5	0,43	500	02351*	02406*	03195*	03205*	
	BK3-DN8-12S	8	12	76	34,5	8	7,5	M 20x1,5	0,44	500	02397*	02410*	03196*	03206*	
	BK3-DN10-14S	10	14	80	36,5	10	8	M 22x1,5	0,50	500	02414*	02415*	03197*	03207*	
	BK3-DN13-16S	13	16	86	43	13	8,5	M 24x1,5	0,65	500	02427*	02428*	03198*	03208*	
	BK3-DN13-20S	13	20	90	43	15	10,5	M 30x2	0,70	500	02845*	02846*	03199*	03209*	
	BK3-DN20-25S	20	25	109	48	20	12	M 36x2	1,70	315	02707*	02769*	03200*	37995*	
	BK3-DN25-30S	25	30	120	57,5	25	13,5	M 42x2	2,40	315	02710*	02772*	03201*	03211*	
	BK3-DN25/32-38S	25	38	124	57,5	25	16	M 52x2	2,80	315	02713*	02775*	03202*	03212*	
	 SAE J514/ISO/DIS11926-1 FEMALE THREAD	BK3-DN6-7/16"UNF	5	69	34,5	12	7/16"-20 UNF	0,50	500	38076*	38094*	38081*	38099*		
BK3-DN10-9/16"UNF		10	72	36	13	9/16"-18 UNF	0,60	500	38077*	38095*	38082*	38100*			
BK3-DN13-3/4"UNF		13	83	41,5	15	3/4"-16 UNF	0,70	500	38078*	38096*	38083*	38101*			
BK3-DN20-1 1/16"UN		20	95	47,5	20	1 1/16"-12 UN	1,80	315	38079*	38097*	11027*	38102*			
BK3-DN25-1 5/16"UN		25	113	56,5	20	1 5/16"-12 UN	2,70	315	38080*	38098*	11026*	38103*			
BK3-DN32-1 5/8"UN		30	111	60	20	1 5/8"-12 UN	5,20	350	39214*	39215*	39216*	39217*			
BK3-DN40-1 7/8"UN		38	140	70	20	1 7/8"-12 UN	10,00	350	39218*	39219*	39220*	39221*			
BK3-DN50-2 1/2"UN		48	150	75	20	2 1/2"-12 UN	12,20	350	39222*	39223*	39224*	39225*			

Please note the pressure ratings of the tube connections!

*Article usually in stock.

Due to material availability the material code of the steel valves may vary from 112A (resp. 1128). DN20-32=812A (8128), DN40-50=212A (2128). Material suitability for the application does not differ from 112A (1128).

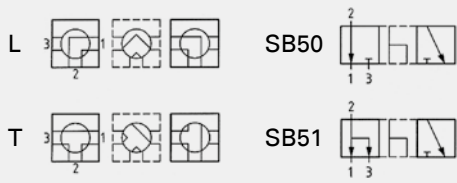


ASSEMBLING THREADS AS PER ISO 5211

DN	SW	LK	g	t ₁	w	ISO 5211
4	9	36	M5	6	30°*	(F03)*
6	9	36	M5	6	30°*	(F03)*
10	9	36	M5	7	45°	F03
13	9	36	M5	6	45°	F03
16	12	42	M5	8	45°	F04
20	14	50	M6	10	45°	F05
25	14	50	M6	10	45°	F05
25/32	14	50	M6	10	45°	F05
25/40	14	50	M6	10	45°	F05

*30° does not correspond to ISO 5211

PORTING PATTERNS

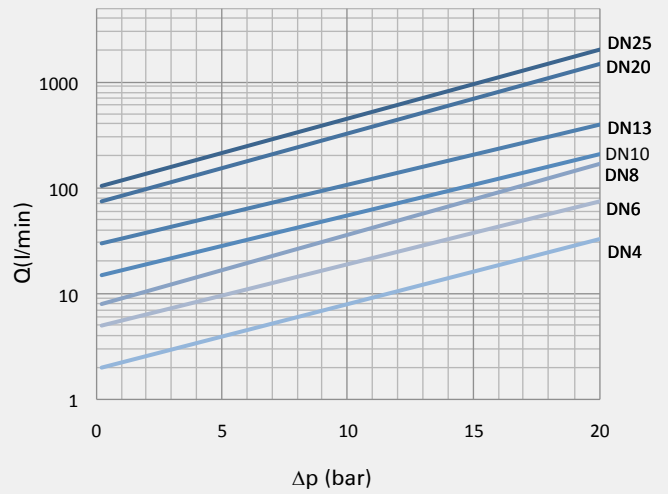


! Pressure inlet only from center port (port 2)!

Further porting patterns page 274 to 279

Please see type BK3-S or 3KH in case you need pressure inlet from all ports.

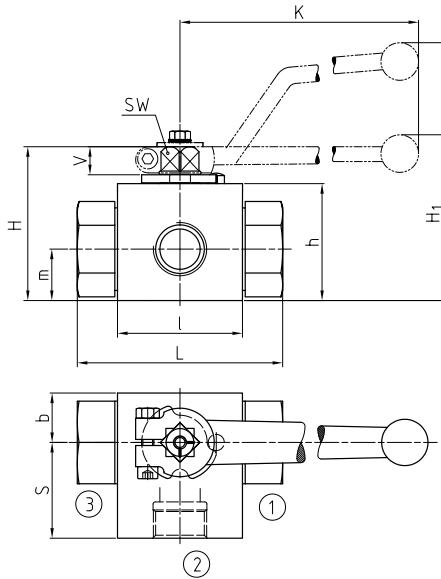
FLOW CHARACTERISTICS BK3-L/T



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

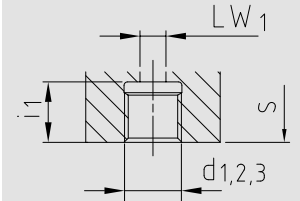
Selector ball valve Stainless Steel

BK3



CONNECTION TYPE (CONNECTION 2)

d₁ DIN ISO 228
d₂ ANSI B1.20.1
d₃ SAE J 514/ISO/DIS11926-1



! Pressure inlet only from center port (port 2)!

AVAILABLE SIZES

DN4 - DN50 (1/8" to 2")

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 236 - 237
- Combinations on request
- Detent on request

MATERIAL CODE DESCRIPTION

Materials	442A	442A	4428	4428
Body	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Ball	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Stem	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	L=SB50	T=SB51	L=SB50	T =SB51

GENERAL DIMENSIONS

Type	l	H	h	m	V	SW	K	H ₁	H ₂	Lever
BK3-DN4	40	47	33	13,5	11	9	115	-	82	Zn
BK3-DN6	40	47	33	13,5	11	9	115	-	82	Zn
BK3-DN8	40	47	33	13,5	11	9	115	-	82	Zn
BK3-DN10	43	52	38	17,5	11	9	115	-	86	Zn
BK3-DN13	48	54	40	19	11	9	115	-	89	Zn
BK3-DN20	62	75	57	24,5	14	14	200	79	-	Zn
BK3-DN25	66	83	65	29,5	14	14	200	87	-	Zn
BK3-DN25/32	66	83	65	29,5	14	14	200	87	-	Zn
BK3-DN32	81	106	84,5	39	16,5	17	320	115	-	Al
BK3-DN40	104	127	106	53	16,5	17	320	136	-	Al
BK3-DN50	118	137	116	58	16,5	17	320	146	-	Al

Multway

Selector ball valve Stainless Steel

BK3

CONNECTION TYPE (CONNECTIONS 1 AND 3)	DIMENSIONS											ORDER CODE PER MATERIAL COMBINATION					
DIN ISO 228 FEMALE THREAD	Type	LW	L	b	S	i	d	i ₁	d ₁	LW ₁	Weight [Kg]	PN [bar]	442A L=SB50	442A T=SB51	4428 L=SB50	4428 T=SB51	
	BK3-DN4-G1/8	5	69	13	34,5	10	G1/8	10	G1/8	4	0,55	500	40910*	41806*	41812*	41817*	
	BK3-DN6-G1/4	6	69	13	34,5	14	G1/4	14	G1/4	6	0,55	500	40911*	41807*	41813*	41818*	
	BK3-DN10-G3/8	10	72	16	36	14	G3/8	14	G3/8	10	0,77	500	40868*	41808*	41814*	41819*	
	BK3-DN13-G1/2	13	83	17,5	39,5	16,3	G1/2	16,3	G1/2	13	0,90	500	40912*	41809*	40949*	41820*	
	BK3-DN13-G5/8	13	83	17,5	39,5	16	G5/8	16	G5/8	13	0,90	500	40913*	41810*	41815*	41821*	
	BK3-DN20-G3/4	20	95	24,5	47,5	18	G3/4	18	G3/4	20	1,95	315	40914*	41811*	41816*	41822*	
	BK3-DN25-G1	25	113	29	56,5	20	G1	20	G1	25	2,40	315	42177*	38282*	42180*	38283*	
	BK3-DN25/32-G1 1/4	25	120	29	57	22	G1 1/4	22	G1 1/4	25	2,64	315	42179*	38284*	38275*	38285*	
	BK3-DN32-G1 1/4	30	111	39	55	22	G1 1/4	22	G1 1/4	30	5,40	350	62849*	62850*	62851*	38289*	
	BK3-DN40-G1 1/2	38	130	53	65	24	G1 1/2	24	G1 1/2	38	9,40	350	38290*	38292*	38291*	38293*	
BK3-DN50-G2	48	150	58	75	26	G2	26	G2	48	13,00	350	62852*	62853*	62854*	38296*		
ANSI B1.20.1 NPT FEMALE THREAD	Type	LW	L	b	S	i	d	i ₁	d ₂	LW ₁	Weight [Kg]	PN [bar]	442A L=SB50	442A T=SB51	4428 L=SB50	4428 T=SB51	
	BK3-DN4-1/8"NPT	5	69	13	34,5	10,5	1/8"NPT	10,5	1/8"NPT	4	0,55	500	41080*	41823*	41828*	41833*	
	BK3-DN6-1/4"NPT	6	69	13	34,5	13,7	1/4"NPT	13,7	1/4"NPT	6	0,55	500	41081*	41824*	41829*	41834*	
	BK3-DN10-3/8"NPT	10	72	16	36	13,5	3/8"NPT	13,5	3/8"NPT	10	0,77	500	41082*	41825*	41830*	41835*	
	BK3-DN13-1/2"NPT	13	83	17,5	39,5	17	1/2"NPT	17	1/2"NPT	13	0,90	500	41083*	41826*	41831*	41836*	
	BK3-DN20-3/4"NPT	20	95	24,5	47,5	18,3	3/4"NPT	18,3	3/4"NPT	20	1,95	315	41084*	41827*	41832*	41837*	
	BK3-DN25-1"NPT	25	113	29	56,5	21,6	1"NPT	21,6	1"NPT	25	2,40	315	38347	38349	38348	38350	
	BK3-DN25/32-1 1/4"NPT	25	120	29	57,5	22,1	1 1/4"NPT	22,1	1 1/4"NPT	25	2,65	315	38351	38353	38352	38354	
	BK3-DN32-1 1/4"NPT	30	120	39	60	22,1	1 1/4"NPT	22,1	1 1/4"NPT	30	5,40	350	38355	38357	38356	38358	
	BK3-DN40-1 1/2"NPT	38	140	53	70	22,1	1 1/2"NPT	22,1	1 1/2"NPT	38	9,40	350	62855	38361	38360	38362	
	BK3-DN50-2"NPT	48	150	58	75	30,3	2"NPT	30,3	2"NPT	48	13,00	350	38363	40284	40285	40286	
DIN 2353 / ISO 8434-1 LIGHT SERIES	Type	LW	RA	L	b	S	i	d	i ₁	d ₁ ⁽¹⁾	LW ₁	Weight [Kg]	PN [bar]	442A L=SB50	442A T=SB51	4428 L=SB50	4428 T=SB51
	BK3-DN4-6L	5	6	67	13	34,5	7	M 12x1,5	10	G1/8	4	0,50	500	41838*	41845*	41852*	41859*
	BK3-DN6-8L	6	8	67	13	34,5	7	M 14x1,5	14	G1/4	6	0,52	500	41839*	41846*	41853*	41860*
	BK3-DN8-10L	8	10	74	13	34,5	7	M 16x1,5	14	G1/4	6	0,54	500	41840*	41847*	41854*	41861*
	BK3-DN10-12L	10	12	74	16	36	7	M 18x1,5	14	G3/8	10	0,73	500	41841*	41848*	41855*	41862*
	BK3-DN13-15L	13	15	82	17,5	39,5	7	M 22x1,5	16,3	G1/2	13	0,85	500	41842*	41849*	41856*	41863*
	BK3-DN13-18L	13	18	82	17,5	39,5	7,5	M 26x1,5	16	G5/8	13	0,89	500	41843*	41850*	41857*	41864*
	BK3-DN20-22L	20	22	101	24,5	47,5	7,5	M 30x2	18	G3/4	20	1,87	315	41844*	41851*	41858*	41865*
	BK3-DN25-28L	25	28	108	29	56,5	7,5	M 36x2	20	G1	25	2,45	315	42181*	42182*	42185*	42186*
	BK3-DN25/32-35L	25	35	112	29	57	10,5	M 45x2	22	G1 1/4	25	2,90	315	42183*	42184*	42187*	42188*

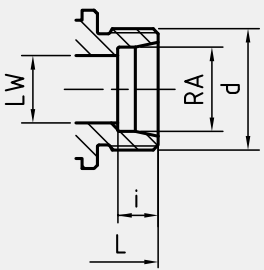
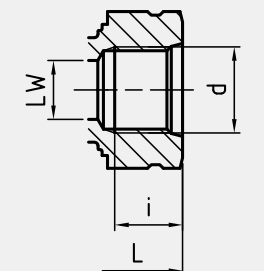
Please note the pressure ratings of the tube connections!
⁽¹⁾Transition adapters for light and heavy series on request.

*Article usually in stock.

Selector ball valve Stainless Steel

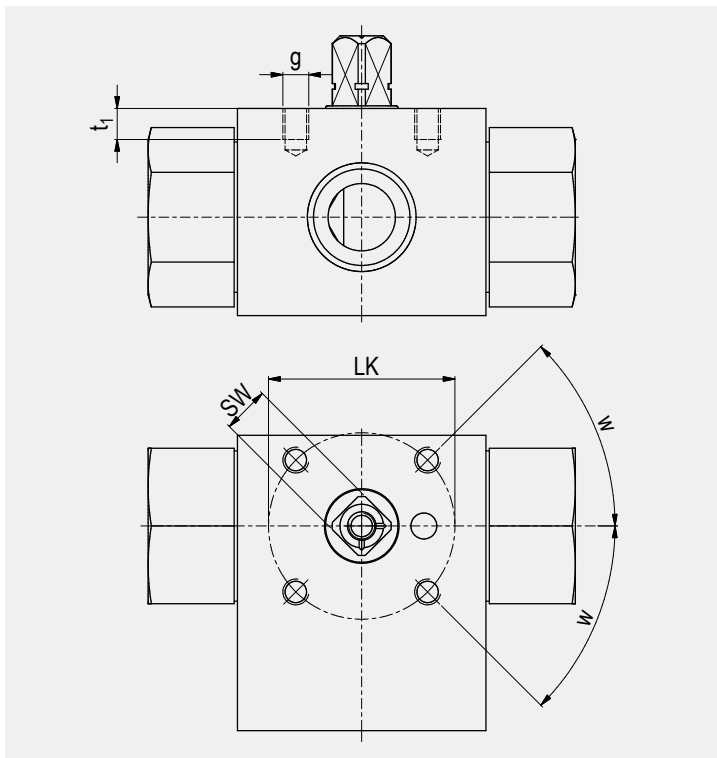
BK3

Multway

CONNECTION TYPE (CONNECTIONS 1 AND 3)		DIMENSIONS											ORDER CODE PER MATERIAL COMBINATION					
DIN 2353 / ISO 8434-1 HEAVY SERIES		Type	LW	RA	L	b	S	i	d	i ₁	d ₁ ⁽¹⁾	LW ₁	Weight [Kg]	PN [bar]	442A L=SB50	442A T=SB51	4428 L=SB50	4428 T=SB51
		BK3-DN4-8S	5	8	73	13	34,5	7	M 16x1,5	10	G1/8	4	0,52	500	41866*	41873*	41880*	41887*
		BK3-DN6-10S	6	10	73	13	34,5	7,5	M 18x1,5	14	G1/4	6	0,54	500	41867*	41874*	41881*	41888*
		BK3-DN8-12S	8	12	76	13	34,5	7,5	M 20x1,5	14	G1/4	6	0,56	500	41868*	41875*	41882*	41889*
		BK3-DN10-14S	10	14	80	16	36	8	M 22x1,5	14	G3/8	10	0,73	500	41869*	41876*	41883*	41890*
		BK3-DN13-16S	13	16	86	17,5	39,5	8,5	M 24x1,5	16,3	G1/2	13	0,86	500	41870*	41877*	41884*	41891*
		BK3-DN13-20S	13	20	90	17,5	39,5	10,5	M 30x2	16	G5/8	13	0,94	500	41871*	41878*	41885*	41892*
		BK3-DN20-25S	20	25	109	24,5	47,5	12	M 36x2	18	G3/4	20	1,95	315	41872*	41879*	41886*	41893*
		BK3-DN25-30S	25	30	120	29	56,5	13,5	M 42x2	20	G1	25	2,65	315	42189*	42190*	42193*	42194*
		BK3-DN25/32-38S	25	38	124	29	57	16	M 52x2	22	G1 1/4	25	3,10	315	42191*	42192*	42195*	42196*
SAE J514/ISO/DIS11926-1 FEMALE THREAD		Type	LW	L	b	S	i	d	i ₁	d ₃	LW ₁	Weight [Kg]	PN [bar]	442A L=SB50	442A T=SB51	4428 L=SB50	4428 T=SB51	
		BK3-DN6-7/16"UNF	5	69	13	34,5	12	7/16"-20 UNF	12	7/16"-20 UNF	6	0,55	500	41894*	41898*	41902*	41906*	
		BK3-DN10-9/16"UNF	10	72	16	36	13	9/16"-18 UNF	13	9/16"-18 UNF	7,5	0,77	500	41895*	41899*	41903*	41907*	
		BK3-DN13-3/4"UNF	13	83	17,5	39,5	15	3/4"-16 UNF	15	3/4"-16 UNF	13	0,90	500	41896*	41900*	41904*	41908*	
		BK3-DN20-1 1/16"UN	20	95	24,5	47,5	20	1 1/16"-12 UN	20	1 1/16"-12 UN	16	1,95	315	41897*	41901*	41905*	41909*	
		BK3-DN25-1 5/16"UN	25	113	29	56,5	20	1 5/16"-12 UN	20	1 5/16"-12 UN	21	2,80	315	38312	38314	38313	38315	
		BK3-DN32-1 5/8"UN	30	111	39	60	20	1 5/8"-12 UN	20	1 5/8"-12 UN	30	7,00	350	38316	38318	38317	38319	
		BK3-DN40-1 7/8"UN	38	140	53	70	20	1 7/8"-12 UN	20	1 7/8"-12 UN	38	10,50	350	38320	38322	38321	38323	
		BK3-DN50-2 1/2"UN	48	150	58	75	20	2 1/2"-12 UN	20	2 1/2"-12 UN	48	14,50	350	38324	38326	38325	38327	

Please note the pressure ratings of the tube connections!
⁽¹⁾Transition adapters for light and heavy series on request.

*Article usually in stock.

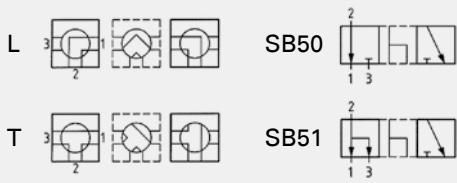


ASSEMBLING THREADS AS PER ISO 5211

DN	SW	LK	g	t ₁	w	ISO 5211
4	9	36	M5	6	30°*	(F03)*
6	9	36	M5	6	30°*	(F03)*
10	9	36	M5	7	45°	F03
13	9	36	M5	6	45°	F03
16	12	42	M5	8	45°	F04
20	14	50	M6	10	45°	F05
25	14	50	M6	10	45°	F05
25/32	14	50	M6	10	45°	F05
25/40	14	50	M6	10	45°	F05

*30° does not correspond to ISO 5211

PORTING PATTERNS

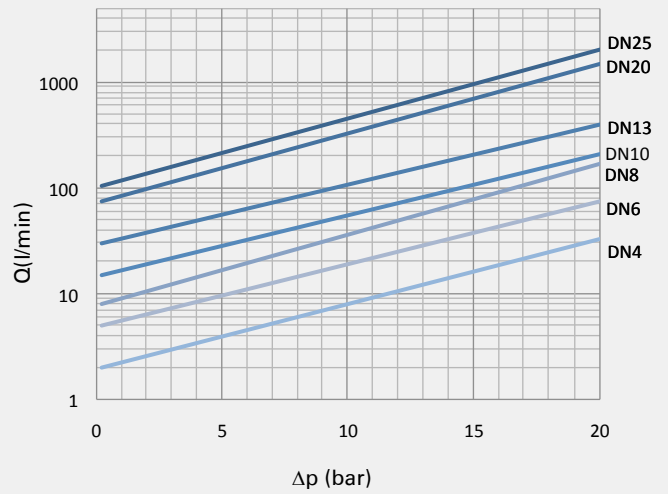


! Pressure inlet only from center port (port 2)!

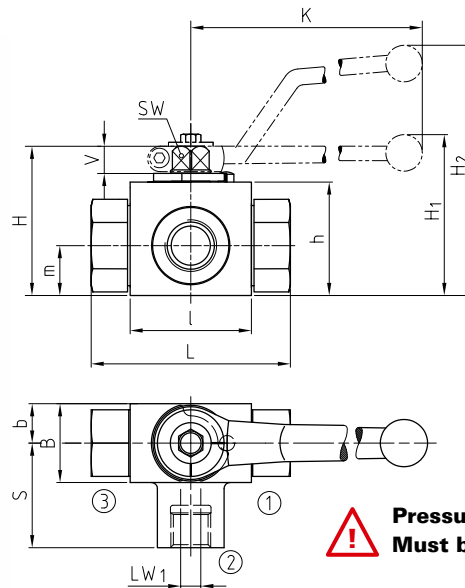
Further porting patterns page 274 to 279

Please see type BK3-S or 3KH in case you need pressure inlet from all ports.

FLOW CHARACTERISTICS BK3-L/T



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



AVAILABLE SIZES

DN4 - DN50 (1/8" to 2")

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 19
- Position switches 236 - 237
- Combinations 198 - 199
- Detent on request

MATERIAL CODE DESCRIPTION

Materials	118A	118A	1188	1188
Body	Steel	Steel	Steel	Steel
Ball	Steel	Steel	Steel	Steel
Stem	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	L=SB55	T=SB56	L=SB55	T=SB56

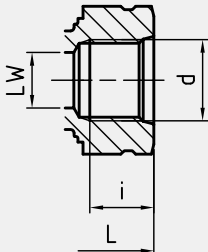
GENERAL DIMENSIONS

Type	l	b	B	H	h	m	V	SW	K	H ₁	H ₂	Lever
BK3-S-DN4	40	13	29	47	33	13,5	11	9	115	-	82	Zn
BK3-S-DN6	40	13	29	47	33	13,5	11	9	115	-	82	Zn
BK3-S-DN8	40	13	29	47	33	13,5	11	9	115	-	82	Zn
BK3-S-DN10	43	16	35	52	38	17,5	11	9	115	-	86	Zn
BK3-S-DN13	48	17,5	38	54	40	19	11	9	115	-	89	Zn
BK3-S-DN20	62	24,5	52	75	57	24,5	14	14	200	79	-	Zn
BK3-S-DN25	66	29	61	83	65	29,5	14	14	200	87	-	Zn
BK3-S-DN25/32	66	29	61	83	65	29,5	14	14	200	87	-	Zn
BK3-S-DN32	81	39	-	106	84,5	39	16,5	17	320	115	-	Al
BK3-S-DN40	104	53	-	127	106	53	16,5	17	320	136	-	Al
BK3-S-DN50	118	58	-	137	116	58	16,5	17	320	146	-	Al

CONNECTION TYPE	DIMENSIONS								ORDER CODE PER MATERIAL COMBINATION					
DIN ISO 228 FEMALE THREAD	Type	LW	L	S	LW ₁	i	d	Weight [Kg]	PN [bar]	118A L=SB55	118A T=SB56	1188 L=SB55	1188 T=SB56	
	BK3-S-DN4-G1/8	5	69	34,5	4	10	G1/8	0,40	500	02543*	02569*	38007*	38022*	
	BK3-S-DN6-G1/4	6	69	34,5	6	14	G1/4	0,46	500	20039*	02572*	04330*	38023*	
	BK3-S-DN10-G3/8	10	72	36	10	14	G3/8	0,60	500	00902*	20119*	04102*	38024*	
	BK3-S-DN13-G1/2	13	83	41,5	13	16,3	G1/2	0,70	315	02554*	02580*	27347*	28639*	
	BK3-S-DN13-G5/8	13	83	41,5	13	16	G5/8	0,70	315	02557*	38018*	38008*	38025*	
	BK3-S-DN20-G3/4	20	95	47,5	20	18	G3/4	1,80	315	02717*	02767*	19972*	09399*	
	BK3-S-DN25-G1	25	113	56,5	25	20	G1	2,40	315	02720*	02779*	38009*	11954*	
	BK3-S-DN25/32-G1 1/4	25	120	57	25	22	G1 1/4	2,64	315	02723*	02780*	38010*	38026*	
	BK3-S-DN32-G1 1/4	30	111	55	30	22	G 1 1/4	4,80	350	38013*	38019*	33276*	38027*	
	BK3-S-DN40-G1 1/2	38	130	65	38	24	G 1 1/2	8,90	350	30040*	38020*	38011*	38028*	
BK3-S-DN50-G2	48	150	75	48	26	G2	12,40	350	38006*	38021*	38012*	38029*		
ANSI B1.20.1 NPT FEMALE THREAD	Type	LW	L	S	LW ₁	i	d	Weight [Kg]	PN [bar]	118A L=SB55	118A T=SB56	1188 L=SB55	1188 T=SB56	
	BK3-S-DN4-1/8" NPT	5	69	34,5	4	10,5	1/8" NPT	0,40	500	40224*	40225*	40226*	40227*	
	BK3-S-DN6-1/4" NPT	6	69	34,5	6	13,7	1/4" NPT	0,46	500	34885*	38058*	38041*	38059*	
	BK3-S-DN10-3/8" NPT	10	72	36	10	13,5	3/8" NPT	0,60	500	14368*	38060*	38042*	38061*	
	BK3-S-DN13-1/2" NPT	13	83	41,5	13	17	1/2" NPT	0,70	315	28281*	38062*	38043*	38063*	
	BK3-S-DN20-3/4" NPT	20	95	47,5	20	18,3	3/4" NPT	1,80	315	38035*	38064*	28242*	38065*	
	BK3-S-DN25-1" NPT	25	113	56,5	25	21,6	1" NPT	2,40	315	38036*	38066*	38044*	38067*	
	BK3-S-DN25/32-1 1/4" NPT	25	120	57,5	25	22,1	1 1/4" NPT	2,64	315	38037*	38068*	38045*	38069*	
	BK3-S-DN32-1 1/4" NPT	30	120	60	30	22,1	1 1/4" NPT	5,24	350	38038*	38070*	38046*	38071*	
	BK3-S-DN40-1 1/2" NPT	38	140	70	38	22,1	1 1/2" NPT	10,00	350	38039*	38072*	38047*	38073*	
	BK3-S-DN50-2" NPT	48	150	75	48	30,2	2" NPT	12,20	350	38040*	38074*	38048*	38075*	
DIN 2353 / ISO 8434-1 LIGHT SERIES	Type	LW	RA	L	S	LW ₁	i	d	Weight [Kg]	PN [bar]	118A L=SB55	118A T=SB56	1188 L=SB55	1188 T=SB56
	BK3-S-DN4-6L	5	6	67	33,5	4	7	M 12x1,5	0,30	500	02541*	02567*	04271*	37979*
	BK3-S-DN6-8L	6	8	67	33,5	6	7	M 14x1,5	0,40	500	02544*	02570*	04251*	37980*
	BK3-S-DN8-10L	8	10	74	34,5	8	7	M 16x1,5	0,40	500	02548*	02574*	37973*	37981*
	BK3-S-DN10-12L	10	12	74	36,5	10	7	M 18x1,5	0,50	500	04801*	37977*	04803*	37982*
	BK3-S-DN13-15L	13	15	82	41	13	7	M 22x1,5	0,65	315	02552*	02578*	04116*	37983*
	BK3-S-DN13-18L	13	18	82	41,5	13	7,5	M 26x1,5	0,69	315	02555*	37978*	33246*	37984*
	BK3-S-DN20-22L	20	22	101	48	20	7,5	M 30x2	1,50	315	20287*	02765*	37974*	37985*
	BK3-S-DN25-28L	25	28	108	54	25	7,5	M 36x2	2,10	315	02718*	02777*	37975*	37986*
	BK3-S-DN25/32-35L	25	35	112	56	25	10,5	M 45x2	2,50	315	02721*	02782*	37976*	37987*
	DIN 2353 / ISO 8434-1 HEAVY SERIES	Type	LW	RA	L	S	LW ₁	i	d	Weight [Kg]	PN [bar]	118A L=SB55	118A T=SB56	1188 L=SB55
	BK3-S-DN4-8S	5	8	73	34,5	4	7	M 16x1,5	0,42	500	02542*	02568*	37989*	37996*
	BK3-S-DN6-10S	6	10	73	34,5	6	7,5	M 18x1,5	0,43	500	02545*	02571*	37990*	37997*
	BK3-S-DN8-12S	8	12	76	34,5	8	7,5	M 20x1,5	0,44	500	02547*	02573*	37991*	37998*
	BK3-S-DN10-14S	10	14	80	36,5	10	8	M 22x1,5	0,50	500	04782*	02577*	37992*	37999*
	BK3-S-DN13-16S	13	16	86	43	13	8,5	M 24x1,5	0,65	315	02553*	02579*	37993*	38000*
	BK3-S-DN13-20S	13	20	90	43	15	10,5	M 30x2	0,70	315	20288*	36377*	29921*	38001*
	BK3-S-DN20-25S	20	25	109	48	20	12	M 36x2	1,70	315	10073*	02766*	04955*	38002*
	BK3-S-DN25-30S	25	30	120	57,5	25	13,5	M 42x2	2,40	315	02719*	02778*	37994*	38003*
	BK3-S-DN25/32-38S	25	38	124	57,5	25	16	M 52x2	2,80	315	02722*	02781*	32489*	38004*

Please note the pressure ratings of the tube connections!

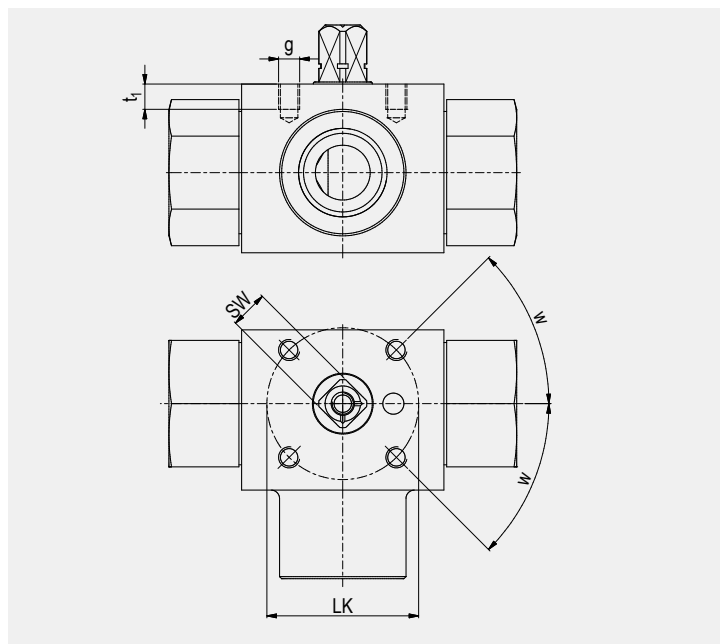
*Article usually in stock.

CONNECTION TYPE	DIMENSIONS								ORDER CODE PER MATERIAL COMBINATION				
	Type	LW	L	S	LW ₁	i	d	Weight [Kg]	PN [bar]	118A L=SB55	118A T=SB56	1188 L=SB55	1188 T=SB56
 SAE J514/ISO/DIS11926-1 FEMALE THREAD	BK3-S-DN6-7/16"UNF	5	69	34,5	6	12	7/16"-20 UNF	0,50	500	38084*	38104*	38089*	38109*
	BK3-S-DN10-9/16"UNF	10	72	36	7,5	13	9/16"-18 UNF	0,60	500	38085*	38105*	38090*	38110*
	BK3-S-DN13-3/4"UNF	13	83	41,5	13	15	3/4"-16 UNF	0,70	315	38086*	38106*	38091*	38111*
	BK3-S-DN20-1 1/16"UN	20	105	47,5	16	20	1 1/16"-12 UN	1,80	315	38087*	38107*	38092*	38112*
	BK3-S-DN25-1 5/8"UN	25	113	56,5	21	20	1 5/8"-12 UN	2,70	315	38088*	38108*	38093*	38113*
	BK3-S-DN32-1 5/8"UN	30	111	60	30	20	1 5/8"-12 UN	5,20	350	39226*	39227*	39228*	39229*
	BK3-S-DN40-1 7/8"UN	38	140	70	38	20	1 7/8"-12 UN	10,00	350	39230*	39231*	39232*	39233*
	BK3-S-DN50-2 1/2"UN	48	150	75	48	20	2 1/2"-12 UN	12,20	350	39234*	39235*	39236*	39237*

Please note the pressure ratings of the tube connections!

*Article usually in stock.

Due to material availability the material code of the steel valves may vary from 118A (1188). DN20-32=818A (8188), DN40-50=218A (2188). Material suitability for the application does not differ from 118A (1188).



ASSEMBLING THREADS AS PER ISO 5211						
DN	SW	LK	g	t ₁	w	ISO 5211
4	9	36	M5	6	30°*	(F03)*
6	9	36	M5	6	30°*	(F03)*
10	9	36	M5	7	45°	F03
13	9	36	M5	6	45°	F03
16	12	42	M5	8	45°	F04
20	14	50	M6	10	45°	F05
25	14	50	M6	10	45°	F05
25/32	14	50	M6	10	45°	F05
25/40	14	50	M6	10	45°	F05

*30° does not correspond to ISO 5211

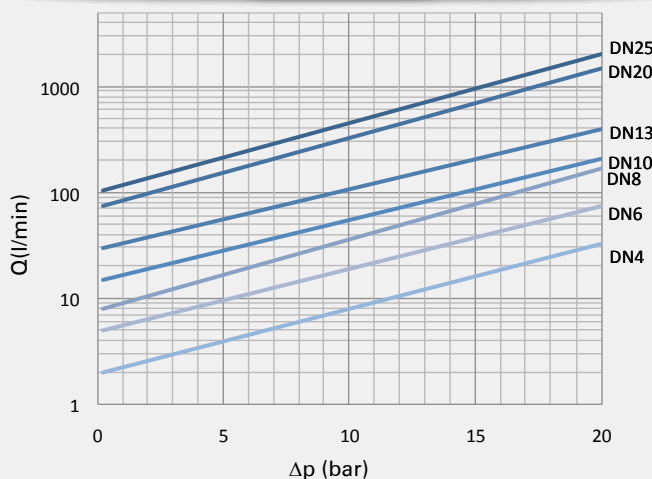
PORTING PATTERNS



Pressure inlet possible from all ports!
Must be operated only at ΔP=0bar!

Further porting patterns page 274 to 279

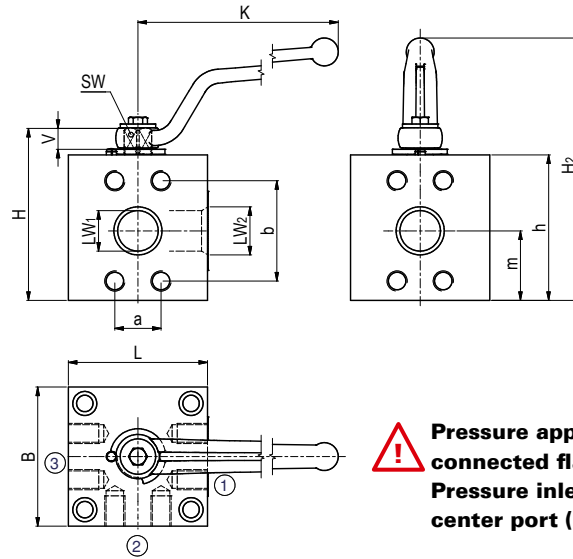
FLOW CHARACTERISTICS BK3S-L/T



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

3-way compact ball valve with SAE connection metric Steel

BK3K-SAE



AVAILABLE SIZES

DN13 - DN50 (1/2" to 2")

! Pressure application only with connected flanges. Pressure inlet only from center port (port 2)!

ACCESSORIES ON REQUEST

- Locking devices on request
- Actuators page 228 - 229
- Mounting holes on request
- Position switches on request
- Combinations on request
- Detent on request

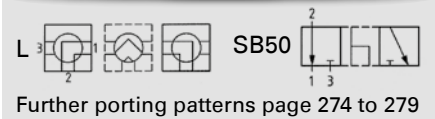
MATERIAL CODE DESCRIPTION

Materials	112A	1128
Body	Steel	Steel
Ball	Steel	Steel
Stem	Steel	Steel
Ball seats	POM	POM
O-rings	NBR	FPM
Tmin / Tmax	-20°C / 100°C	-20°C / 100°C
Porting pattern	L=SB50	L=SB50

CONNECTIONS

ISO 6162-2

PORTING PATTERNS



GENERAL DIMENSIONS

Type	LW ₁	LW ₂	L	B	H	h	m	V	SW	K	H ₂	Lever	Weight [Kg]
BK3K-DN13	13	13	70	70	70	56	28	11	9	115	108	St	1,90
BK3K-DN20	20	20	80	80	87	72	36	14	14	171	137	St	3,20
BK3K-DN25	25	25	94	94	96	81	42	14	14	171	147	St	4,85
BK3K-DN32	30	32	100	100	117	100	50,5	16,5	17	306	190	St	6,80
BK3K-DN32/40	30	38	110	110	136	115	55	16,5	17	306	209	St	9,55
BK3K-DN50	48	48	135	135	147	135	67,5	16,5	17	306	220	St	15,50

CONNECTION TYPE

ISO 6162-2

DIMENSIONS

Type	a	b	M ⁽¹⁾	t ₁	G	d ₁	d ₂	t ₂
BK3K-DN13-SAE420	18,2	40,5	M8	18	43	8,5	13,5	9
BK3K-DN20-SAE420	23,8	50,8	M10	20	60	10,5	16,5	11
BK3K-DN25-SAE420	27,8	57,2	M12	21	70	10,5	16,5	11
BK3K-DN32-SAE420	31,8	66,7	M14 ⁽²⁾	21	76	13	19	13
BK3K-DN32-SAE420	31,8	66,7	M12	22	76	13	19	13
BK3K-DN32/40-SAE420	36,5	79,4	M16	24	84	13	19	13
BK3K-DN50-SAE420	44,5	96,8	M20	28	108	13	19	13

ORDER CODE PER MATERIAL COMBINATION

PN [bar]	112A L=SB50	1128 L=SB50
420	39013	39019
420	39014	39020
420	39015	39021
420	39016	39022
420	41913	41914
420	53792	53202
420	39018	39024

⁽¹⁾ Please advise thread dimension with order. UNC threads on request.
⁽²⁾ This thread is not to be used for new designs.

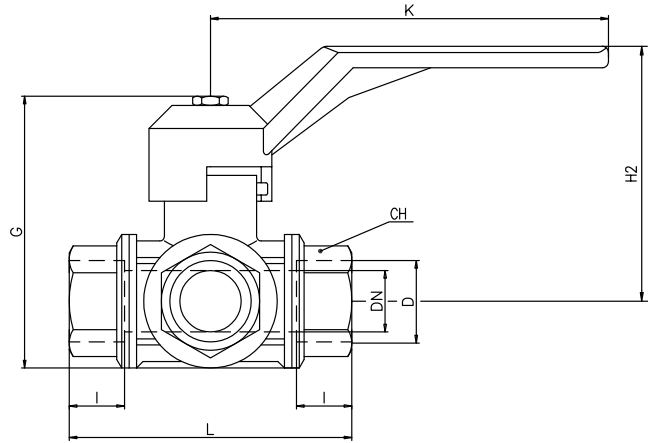
Please note the pressure ratings of the tube connections!

Due to material availability the material code of the steel valves may vary from 112A (or 1128).

DN40-50=812A (or 8128). Material suitability for the application does not differ from 112A (or 1128).

3-way low-pressure ball valve Brass

NK3



Multway

AVAILABLE SIZES

DN6 - DN50 (1/4" to 2")

CONNECTIONS

DIN ISO 228 Female thread

MATERIAL CODE DESCRIPTION

Materials	5574	5574
Body	Brass	Brass
Ball	Brass	Brass
Stem	Brass	Brass
Ball seats	PTFE	PTFE
O-rings	PTFE	PTFE
Tmin / Tmax	-10°C / 120°C	-10°C / 120°C
Porting pattern	L=SB50	T=SB51

GENERAL DIMENSIONS

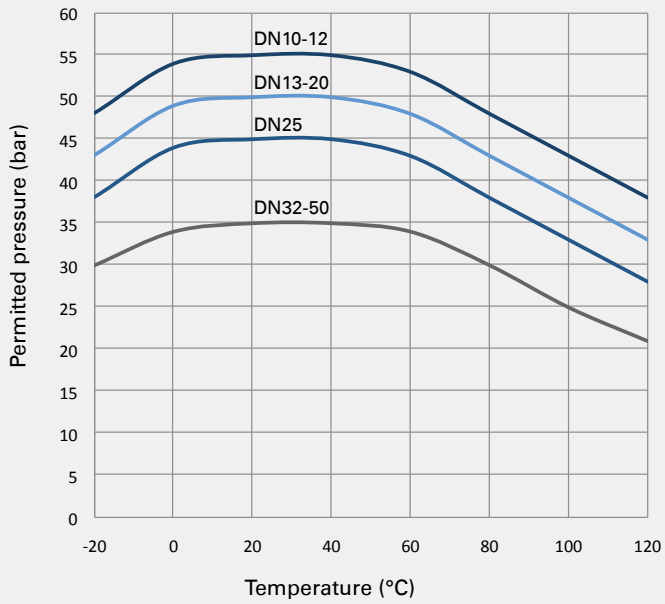
Type	LW	I	L	H	K	H2	CH	Lever	Weight [Kg]
NK3-DN10/6	10	19	77	75	125	65	22	Al	0,71
NK3-DN12/10	12	19	77	75	125	65	22	Al	0,67
NK3-DN13	14	19	77	75	125	65	27	Al	0,65
NK3-DN20	18	23	92	91	145	83	34	Al	1,09
NK3-DN25	23	25	104	105	170	96	41	Al	1,66
NK3-DN32	29	27	118	115	170	102	50	Al	2,22
NK3-DN40	36	31	138	128	170	109	57	Al	3,30
NK3-DN50	45	36	162	165	260	139	70	Al	5,40

ORDER CODE PER MATERIAL COMBINATION

Type	d	PN [bar]	5574 L=SB50	5574 T=SB51
NK3-DN10/6-G1/4	G1/4	55	58742	58734
NK3-DN12/10-G3/8	G3/8	55	58743	58735
NK3-DN13-G1/2	G1/2	50	58744	58736
NK3-DN20-G3/4	G3/4	50	58745	58737
NK3-DN25-G1	G1	45	58746	58738
NK3-DN32-G1 1/4	G1 1/4	35	58747	58739
NK3-DN40-G1 1/2	G1 1/2	35	58748	58740
NK3-DN50-G2	G2	35	58749	58741

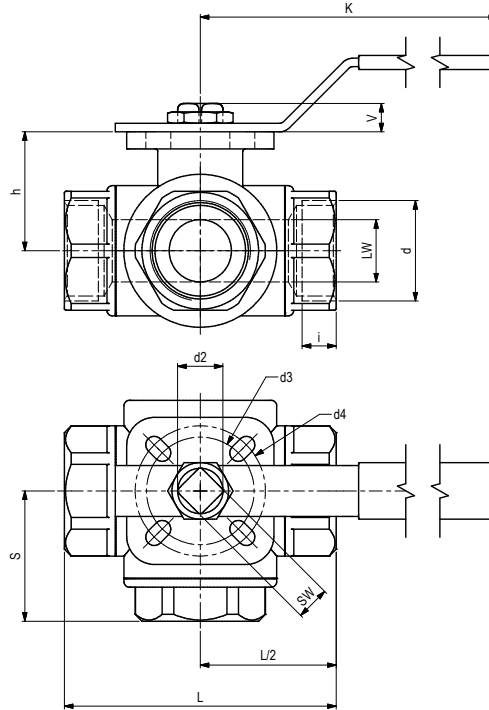
PRESSURE/TEMPERATURE RELATION

Pressure/Temperature curve
NK3 DN10-50 brass



3-way low-pressure ball valve Stainless Steel

NK3



Multway

AVAILABLE SIZES

DN6 - DN50 (1/4" to 2")

CONNECTIONS

DIN ISO 228 Female thread

MATERIAL CODE DESCRIPTION

Materials	4474
Body	CF8M (Stainless Steel)
Ball	Stainless Steel
Stem	Stainless Steel
Ball seats	PTFE
O-rings	PTFE
Tmin / Tmax	-30°C / 200°C
Porting pattern	L=SB50

ACCESSORIES ON REQUEST

• Locking devices included

GENERAL DIMENSIONS

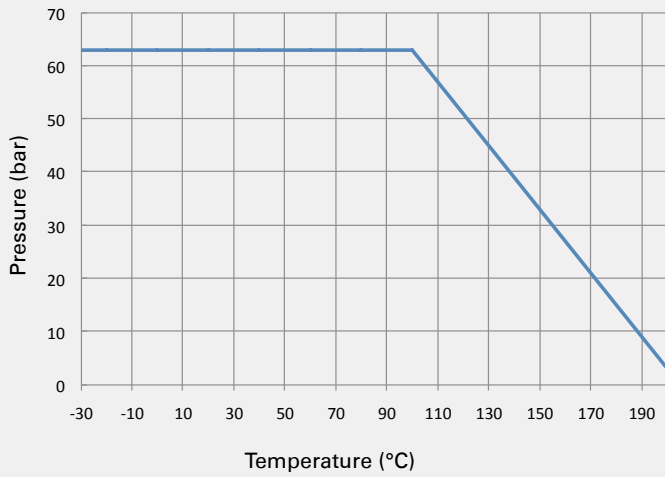
Type	LW	L	h	K	V	d2	SW	S	ISO5211	d3	d4	Lever	i	Weight [Kg]
NK3-DN10/6	11	72	38	106	9	11	9	36	F03/F04	36	42	SS	13	0,68
NK3-DN10	11	72	38	106	9	11	9	36	F03/F04	36	42	SS	13	0,67
NK3-DN13	12,7	75	40	106	9	11	9	38	F03/F04	36	42	SS	14,9	0,67
NK3-DN20	16	86	43	133	9	11	9	42	F03/F04	36	42	SS	17,5	0,88
NK3-DN25	20	100	50	133	11	14	11	50	F04/F05	42	50	SS	16,3	1,55
NK3-DN32	25	115	56	133	11	14	11	58	F04/F05	42	50	SS	21	2,21
NK3-DN40	32	125	66	187	14	18	14	64	F05/F07	50	70	SS	21	3,41
NK3-DN50	38,1	150	74	187	14	18	14	76	F05/F07	50	70	SS	23	5,40

ORDER CODE PER MATERIAL COMBINATION

Type	d	PN [bar]	4474 L=SB50
NK3-DN10/6-G1/4	G1/4	63	58750
NK3-DN10-G3/8	G3/8	63	58751
NK3-DN13-G1/2	G1/2	63	58752
NK3-DN20-G3/4	G3/4	63	58753
NK3-DN25-G1	G1	63	58754
NK3-DN32-G1 1/4	G1 1/4	63	58755
NK3-DN40-G1 1/2	G1 1/2	63	58756
NK3-DN50-G2	G2	63	58757

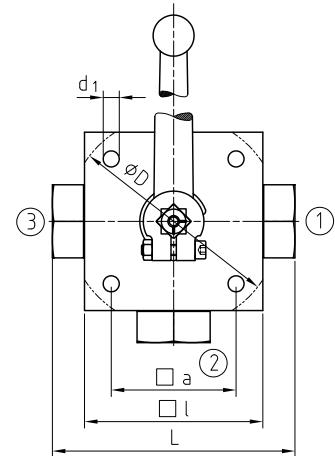
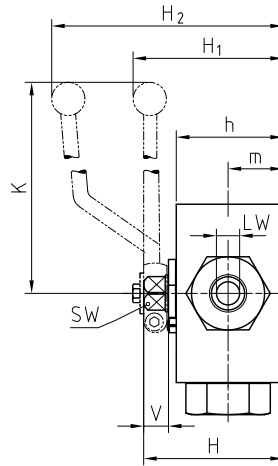
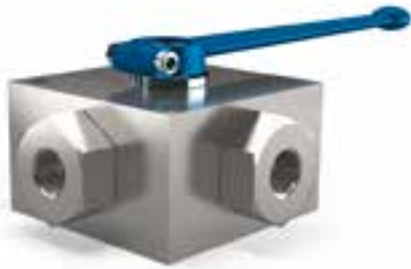
PRESSURE/TEMPERATURE RELATION

Pressure/Temperature curve
NK3 Stainless Steel



Multiway ball valve Steel

3KH



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

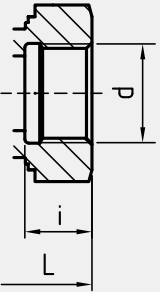
- Locking devices page 230 - 233
- Actuators 228 - 229
- Mounting holes on request
- Position switches on request
- Combinations 200 - 203
- Detent 239

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	L=SB01	T=SB02	L=SB01	T=SB02

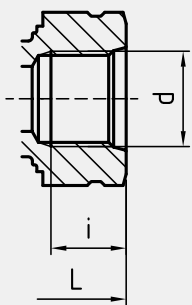
GENERAL DIMENSIONS

Type	LW _{LT}	D	a	l	d ₁	H	h	m	K	V	SW	H ₁	H ₂	Lever
3KH-DN4	5	-	55	70	6,5	58	40	22	160	14	12	-	101	Al
3KH-DN6	5	-	55	70	6,5	58	40	22	160	14	12	-	101	Al
3KH-DN8	8	-	65	80	6,5	68	50	27	200	14	14	72	-	Zn
3KH-DN10	8	-	65	80	6,5	68	50	27	200	14	14	72	-	Zn
3KH-DN13	13	-	80	100	9	78	60	31	200	14	14	82	-	Zn
3KH-DN16	13	-	80	100	9	78	60	31	200	14	14	82	-	Zn
3KH-DN20	18	138	85	113	8,5	88	67	36,5	320	16,5	17	96	-	Al
3KH-DN25	23	138	85	119	8,5	103	82	47,5	320	16,5	17	112	-	Al
3KH-DN25/32	23	138	85	119	8,5	103	82	47,5	320	16,5	17	112	-	Al
3KH-DN25/40	23	138	85	119	8,5	103	82	47,5	320	16,5	17	112	-	Al

CONNECTION TYPE	DIMENSIONS					ORDER CODE PER MATERIAL COMBINATION					
DIN ISO 228 FEMALE THREAD	Type	L	i	d	Weight [Kg]	PN [bar]	112A L=SB01	112A T=SB02	1128 L=SB01	1128 T=SB02	
	3KH-DN4-G1/8	100	10	G1/8	1,60	500	02256*	02254	25762*	25867	
	3KH-DN6-G1/4	100	14	G1/4	1,60	500	20046*	22349	19767*	25868	
	3KH-DN10-G3/8	115	14	G3/8	2,70	500	19241*	20460	20502*	21512	
	3KH-DN13-G1/2	136	16,3	G1/2	4,90	400	19151*	20459	25763*	17220	
	3KH-DN16-G5/8	139	18	G5/8	4,90	400	02661*	02659	03162*	03171	
	3KH-DN20-G3/4	154	18	G3/4	6,70	315	19242*	20458	03163*	03172	
	3KH-DN25-G1	172	20	G1	8,30	315	19243*	20457	25765*	03173	
	3KH-DN25/32-G1 1/4	180	22	G1 1/4	8,50	315	27190	02203	25766	25871	
	3KH-DN25/40-G1 1/2	180	24	G1 1/2	8,50	250	30663	02209	25767	17304	
ANSI B1.20.1 NPT FEMALE THREAD	Type	L	i	d	Weight [Kg]	PN [bar]	112A L=SB01	112A T=SB02	1128 L=SB01	1128 T=SB02	
	3KH-DN4-1/8"NPT	100	10,5	1/8"NPT	1,60	500	33210	19444	25768	25872	
	3KH-DN6-1/4"NPT	100	13,7	1/4"NPT	1,60	500	14380	33212	15716	25873	
	3KH-DN10-3/8"NPT	115	13,5	3/8"NPT	2,80	500	04578	19446	25770	25874	
	3KH-DN13-1/2"NPT	160	17	1/2"NPT	5,20	400	16523	19447	25771	25875	
	3KH-DN20-3/4"NPT	164	18,3	3/4"NPT	6,80	315	17256	17314	15718	25876	
	3KH-DN25-1"NPT	186	21,6	1"NPT	8,50	315	19442	33213	25773	25877	
	3KH-DN25/32-1 1/4"NPT	186	22,1	1 1/4"NPT	8,80	315	19443	19449	16745	19455	
	3KH-DN25/40-1 1/2"NPT	186	22,1	1 1/2"NPT	8,80	250	33211	33214	25775	25879	
DIN 2353 / ISO 8434-1 LIGHT SERIES	Type	RA	L	i	d	Weight [Kg]	PN [bar]	112A L=SB01	112A T=SB02	1128 L=SB01	1128 T=SB02
	3KH-DN4-6L	6	105	7	M 12x1,5	1,60	500	02217*	02215	25746*	25851
	3KH-DN6-8L	8	105	7	M 14x1,5	1,80	500	02223*	02221	25747*	25852
	3KH-DN8-10L	10	114	7	M 16x1,5	2,60	500	02600*	02598	25748*	25853
	3KH-DN10-12L	12	114	7	M 18x1,5	2,60	500	02612*	24278	25749*	25854
	3KH-DN13-15L	15	137	7	M 22x1,5	4,70	400	02630*	02628	25750*	25855
	3KH-DN16-18L	18	137	7,5	M 26x1,5	4,70	400	22027*	02647	25751*	25856
	3KH-DN20-22L	22	152	7,5	M 30x2	6,60	315	20370*	24007	25752*	25857
	3KH-DN25-28L	28	166	7,5	M 36x2	8,00	315	02319*	02317	25753*	25858
	3KH-DN25/32-35L	35	170	10,5	M 45x2	8,12	315	02856*	02857	03130*	03139
DIN 2353 / ISO 8434-1 HEAVY SERIES	Type	RA	L	i	d	Weight [Kg]	PN [bar]	112A L=SB01	112A T=SB02	1128 L=SB01	1128 T=SB02
	3KH-DN4-8S	8	105	7	M 16x1,5	1,60	500	02304*	02303	25754*	25859
	3KH-DN6-10S	10	105	7,5	M 18x1,5	1,60	500	02308*	02309	19002*	25860
	3KH-DN8-12S	12	116	7,5	M 20x1,5	2,60	500	22863*	02604	25756*	25861
	3KH-DN10-14S	14	120	8	M 22x1,5	2,60	500	02618*	02616	25757*	25862
	3KH-DN13-16S	16	141	8,5	M 24x1,5	4,70	400	23058*	02634	25758*	25863
	3KH-DN16-20S	20	145	10,5	M 30x2	4,70	400	23059*	02653	25759*	25864
	3KH-DN20-25S	25	160	12	M 36x2	6,60	315	02268*	29891	25760*	25865
	3KH-DN25-30S	30	176	13,5	M 42x2	8,00	315	02274*	02272	25761*	25866
	3KH-DN25/32-38S	38	180	16	M 52x2	8,30	315	02852*	02853	03094*	03103

Please note the pressure ratings of the tube connections!

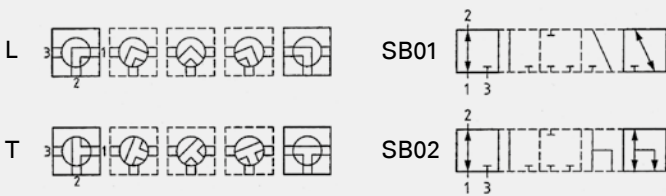
*Article usually in stock.

CONNECTION TYPE	DIMENSIONS					ORDER CODE PER MATERIAL COMBINATION				
	Type	L	i	d	Weight [Kg]	PN [bar]	112A L=SB01	112A T=SB02	1128 L=SB01	1128 T=SB02
SAE J514/ISO/DIS11926-1 FEMALE THREAD 	3KH-DN6-7/16" UNF	100	12	7/16"-20 UNF	1,60	500	37193	37364	31546	39103
	3KH-DN10-9/16" UNF	115	13	9/16"-18 UNF	2,80	500	37194	37365	25631	39104
	3KH-DN13-3/4" UNF	144	15	3/4"-16 UNF	5,20	400	37195	37366	37197	39105
	3KH-DN20-1 1/16" UN	164	20	1 1/16"-12 UN	6,80	315	37196	37367	37198	39106
	3KH-DN25-1 5/16" UN	180	20	1 5/16"-12 UN	8,50	315	32203	37368	22853	39107

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).

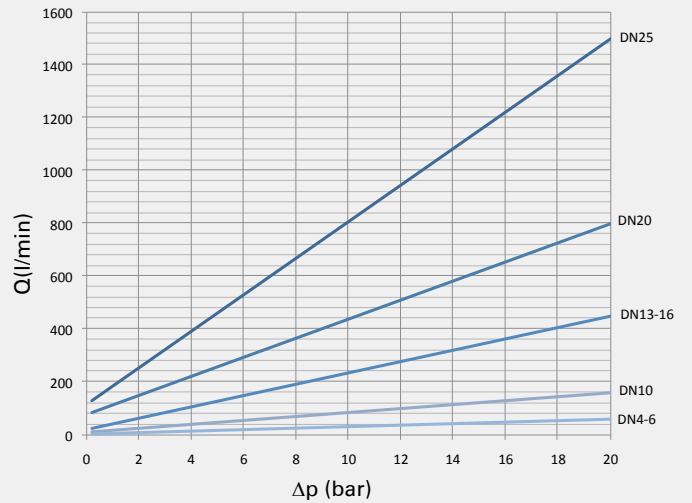
*Article usually in stock.

PORTING PATTERNS



Further porting patterns page 274 to 279

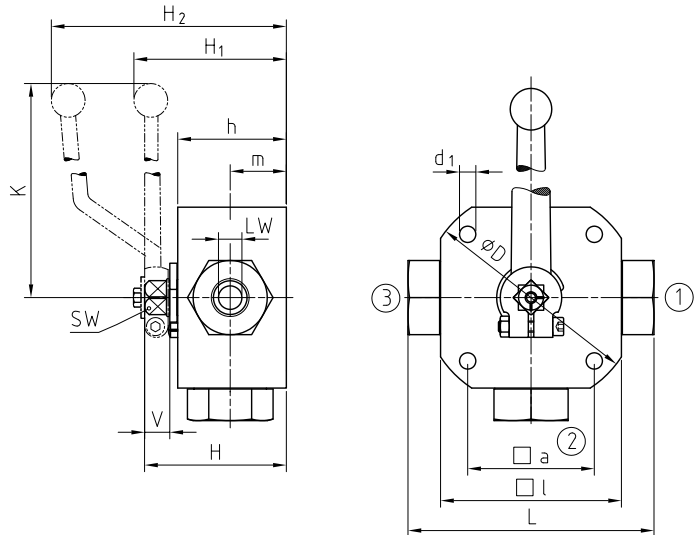
FLOW CHARACTERISTICS 3KH-L/T



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

3KH



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

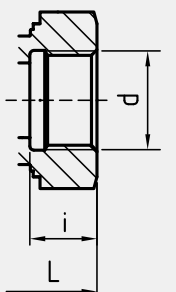
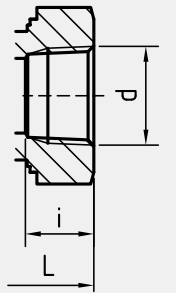
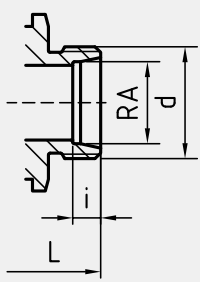
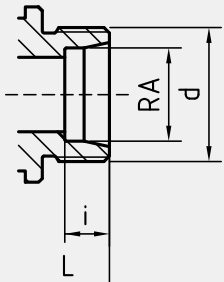
Materials	442A	442A	4428	4428
Body	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Trunnion ball	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Ball seats	POM	POM	POM	POM
O-rings	NBR	NBR	FPM	FPM
Tmin /Tmax	-30°C / 100°C	-30°C / 100°C	-20°C / 100°C	-20°C / 100°C
Porting pattern	L=SB01	T=SB02	L=SB01	T=SB02

GENERAL DIMENSIONS

Type	LW _{LT}	D	a	l	d ₁	H	h	m	K	V	SW	H ₁	H ₂	Lever
3KH-DN4	5	75	40	70	6,5	58	40	22	160	14	12	-	101	Al
3KH-DN6	5	75	40	70	6,5	58	40	22	160	14	12	-	101	Al
3KH-DN8	8	90	45	80	6,5	68	50	27	200	14	14	72	-	Zn
3KH-DN10	8	90	45	80	6,5	68	50	27	200	14	14	72	-	Zn
3KH-DN13	13	110	60	100	9	78	60	31	200	14	14	82	-	Zn
3KH-DN16	13	110	60	100	9	78	60	31	200	14	14	82	-	Zn
3KH-DN20	18	138	85	113	8,5	88	67	36,5	320	16,5	17	96	-	Al
3KH-DN25	23	138	85	119	8,5	103	82	47,5	320	16,5	17	112	-	Al
3KH-DN25/32	23	138	85	119	8,5	103	82	47,5	320	16,5	17	112	-	Al
3KH-DN25/40	23	138	85	119	8,5	103	82	47,5	320	16,5	17	112	-	Al

Multiway ball valve Stainless Steel

3KH

CONNECTION TYPE	DIMENSIONS					ORDER CODE PER MATERIAL COMBINATION					
	Type	L	i	d	Weight [Kg]	PN [bar]	442A L=SB01	442A T=SB02	4428 L=SB01	4428 T=SB02	
DIN ISO 228 FEMALE THREAD 	3KH-DN4-G1/8	100	10	G1/8	1,60	500	37287	37347	37292	39088	
	3KH-DN6-G1/4	100	14	G1/4	1,60	500	12130	10548	32285	20675	
	3KH-DN10-G3/8	115	14	G3/8	2,70	500	10836	37348	37293	31637	
	3KH-DN13-G1/2	136	16,3	G1/2	4,90	400	14623	37349	36503	39089	
	3KH-DN16-G5/8	139	18	G5/8	4,90	400	37288	37350	37294	39090	
	3KH-DN20-G3/4	154	18	G3/4	6,70	315	37289	31516	37295	39091	
	3KH-DN25-G1	172	20	G1	8,30	315	29130	25433	37296	39092	
	3KH-DN25/32-G1 1/4	180	22	G1 1/4	8,50	315	37290	37351	37297	39093	
	3KH-DN25/40G1 1/2	180	24	G1 1/2	8,50	250	37291	37352	37298	39094	
	ANSI B1.20.1 NPT FEMALE THREAD 	3KH-DN4-1/8"NPT	100	10,5	1/8"NPT	1,60	500	37299	37353	37305	39095
3KH-DN6-1/4"NPT		100	13,7	1/4"NPT	1,60	500	28248	37354	37306	39096	
3KH-DN10-3/8"NPT		115	13,5	3/8"NPT	2,80	500	29181	37355	37307	39097	
3KH-DN13-1/2"NPT		160	17	1/2"NPT	5,20	400	37300	37356	37308	39098	
3KH-DN20-3/4"NPT		164	18,3	3/4"NPT	6,80	315	37301	29129	34995	39099	
3KH-DN25-1"NPT		186	21,6	1"NPT	8,50	315	37302	37357	37309	39100	
3KH-DN25/32-1 1/4"NPT		186	22,1	1 1/4"NPT	8,80	315	37303	37358	37310	39101	
3KH-DN25/40-1 1/2"NPT		186	22,1	1 1/2"NPT	8,80	250	37304	32572	37311	39102	
DIN 2353 / ISO 8434-1 LIGHT SERIES 		3KH-DN4-6L	6	105	7	M 12x1,5	1,60	500	37199	37328	37267
	3KH-DN6-8L	8	105	7	M 14x1,5	1,80	500	37200	37329	37268	39073
	3KH-DN8-10L	10	114	7	M 16x1,5	2,60	500	37262	32511	37269	39074
	3KH-DN10-12L	12	114	7	M 18x1,5	2,60	500	34556	37330	37270	39075
	3KH-DN13-15L	15	137	7	M 22x1,5	4,70	400	37263	37331	37271	39076
	3KH-DN16-18L	18	137	7,5	M 26x1,5	4,70	400	37264	37332	37272	39077
	3KH-DN20-22L	22	152	7,5	M 30x2	6,60	315	37265	37333	37273	39078
	3KH-DN25-28L	28	166	7,5	M 36x2	8,00	315	37266	37334	37274	39079
	3KH-DN25/32-35L	35	170	10,5	M 45x2	8,12	315	41942	41943	41944	41945
	DIN 2353 / ISO 8434-1 HEAVY SERIES 	3KH-DN4-8S	8	105	7	M 16x1,5	1,60	500	37275	37335	37279
3KH-DN6-10S		10	105	7,5	M 18x1,5	1,60	500	37276	37336	37280	39081
3KH-DN8-12S		12	116	7,5	M 20x1,5	2,60	500	31678	37337	37281	39082
3KH-DN10-14S		14	120	8	M 22x1,5	2,60	500	18678	37338	37282	39083
3KH-DN13-16S		16	141	8,5	M 24x1,5	4,70	400	32300	37339	37283	39084
3KH-DN16-20S		20	145	10,5	M 30x2	4,70	400	37277	37340	37284	39085
3KH-DN20-25S		25	160	12	M 36x2	6,60	315	37278	37341	37285	39086
3KH-DN25-30S		30	176	13,5	M 42x2	8,00	315	29468	15986	37286	39087
3KH-DN25/32-38S		38	180	16	M 52x2	8,30	315	41946	41947	41948	41949

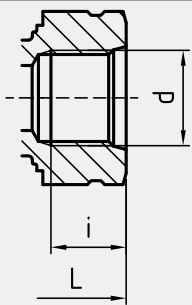
Please note the pressure ratings of the tube connections!

*Article usually in stock.

Multiway ball valve Stainless Steel

3KH

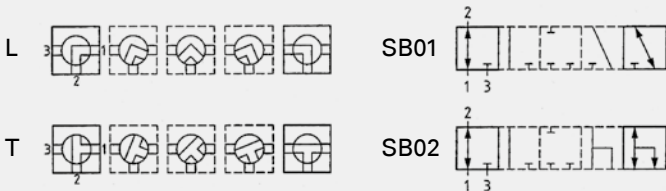
Multiway

CONNECTION TYPE	DIMENSIONS					ORDER CODE PER MATERIAL COMBINATION				
	Type	L	i	d	Weight [Kg]	PN [bar]	442A L=SB01	442A T=SB02	4428 L=SB01	4428 T=SB02
SAE J514/ISO/DIS11926-1 FEMALE THREAD 	3KH-DN6-7/16" UNF	100	12	7/16"-20 UNF	1,60	500	37312	37359	37317	39108
	3KH-DN10-9/16" UNF	115	13	9/16"-18 UNF	2,80	500	37313	37360	37318	39109
	3KH-DN13-3/4" UNF	144	15	3/4"-16 UNF	5,20	400	37314	37361	37319	39110
	3KH-DN20-1 1/16" UN	164	20	1 1/16"-12 UN	6,80	315	37315	37362	37320	39111
	3KH-DN25-1 5/16" UN	180	20	1 5/16"-12 UN	8,50	315	37316	37363	37321	39112

Please note the pressure ratings of the tube connections!

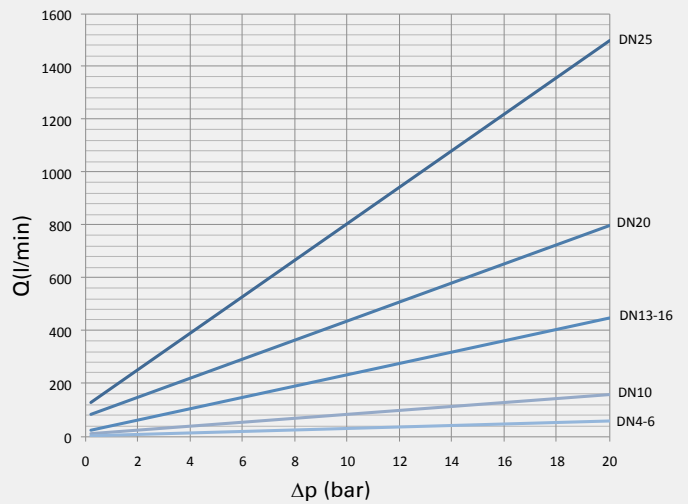
*Article usually in stock.

PORTING PATTERNS



Further porting patterns page 274 to 279

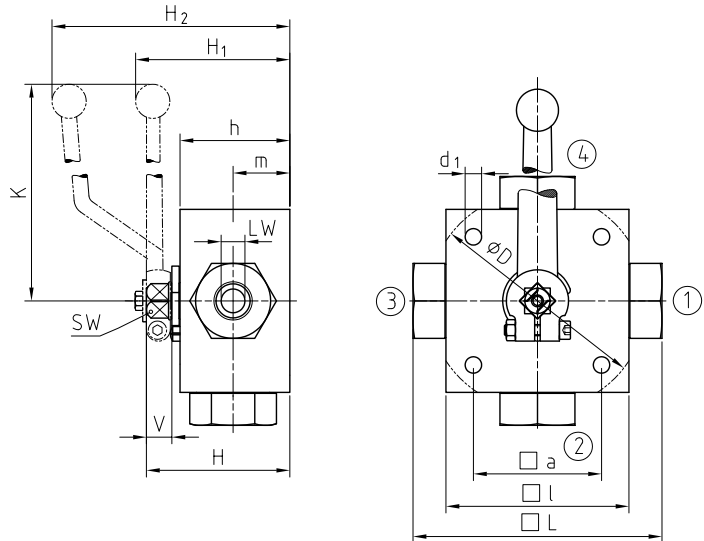
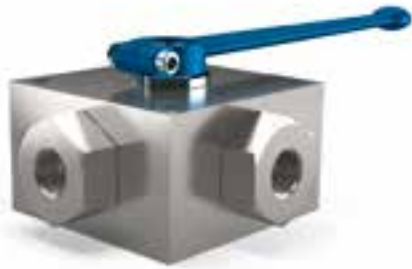
FLOW CHARACTERISTICS 3KH-L/T



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 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

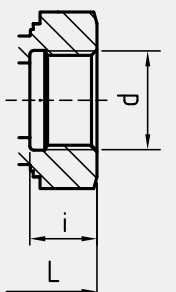
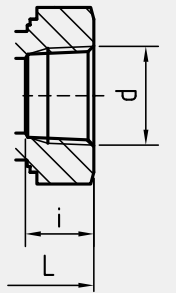
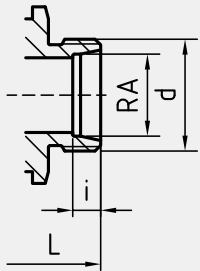
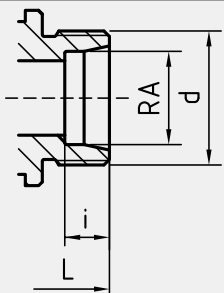
- Locking devices page 230 - 233
- Actuators 228 - 229
- Mounting holes on request
- Position switches on request
- Combinations 200 - 203
- Detent 239

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

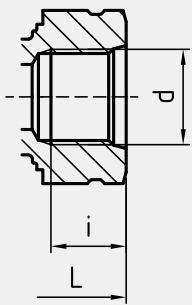
GENERAL DIMENSIONS

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

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
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	DIMENSIONS					ORDER CODE PER MATERIAL COMBINATION				
	Type	L	i	d	Weight [Kg]	PN [bar]	112A T=SB13	112A X=SB14	1128 T=SB13	1128 X=SB14
SAE J514/ISO/DIS11926-1 FEMALE THREAD 	4KH-DN6-7/16" UNF	100	12	7/16"-20 UNF	1,60	500	38189	38190	39171	39172
	4KH-DN10-9/16" UNF	115	13	9/16"-18 UNF	2,80	500	38191	38192	39173	39174
	4KH-DN13-3/4" UNF	144	15	3/4"-16 UNF	4,90	400	38193	38194	39175	22359
	4KH-DN20-1 1/16" UN	164	20	1 1/16"-12 UN	6,80	315	38195	38196	39176	30547
	4KH-DN25-1 5/16" UN	180	20	1 5/16"-12 UN	8,50	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).

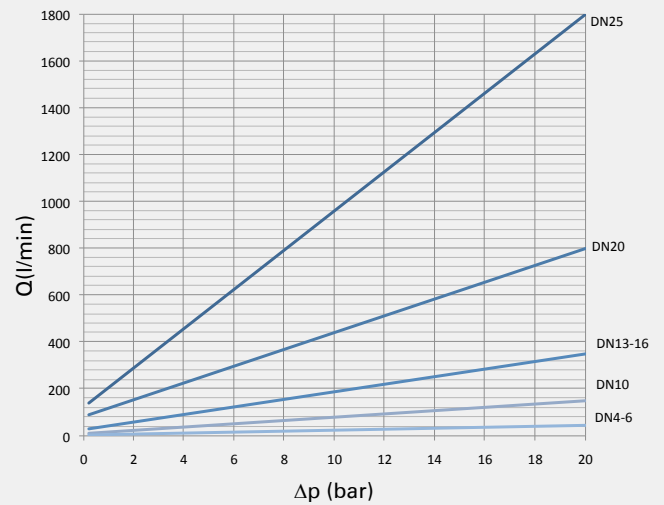
*Article usually in stock.

PORTING PATTERNS



Further porting patterns page 274 to 279

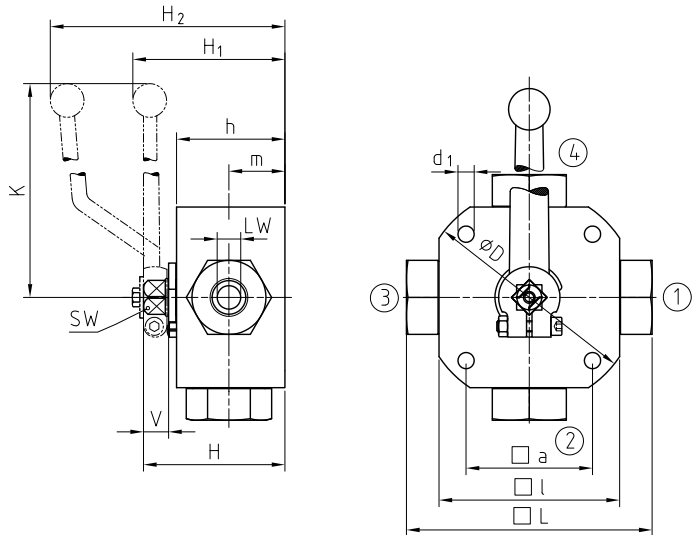
FLOW CHARACTERISTICS 4KH-X/T



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

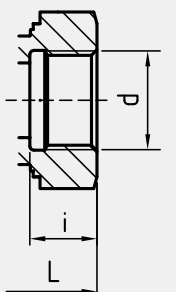
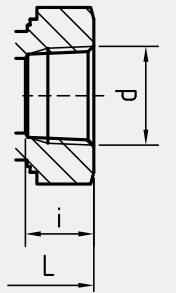
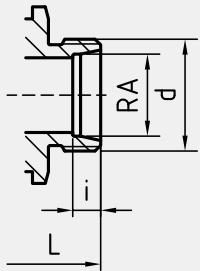
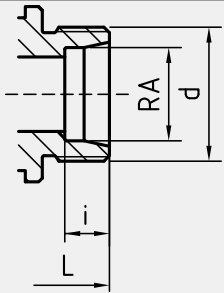
Materials	442A	442A	4428	4428
Body	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Trunnion ball	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Ball seats	POM	POM	POM	POM
O-rings	NBR	NBR	FPM	FPM
Tmin /Tmax	-30°C / 100°C	-30°C / 100°C	-20°C / 100°C	-20°C / 100°C
Porting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

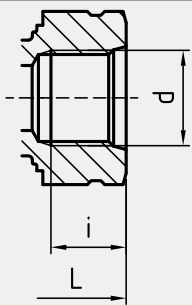
Please note the pressure ratings of the tube connections!

*Article usually in stock.

Multiway ball valve Stainless Steel

4KH

Multiway

CONNECTION TYPE	DIMENSIONS					ORDER CODE PER MATERIAL COMBINATION				
	Type	L	i	d	Weight [Kg]	PN [bar]	442A T=SB13	442A X=SB14	4428 T=SB13	4428 X=SB14
SAE J514/ISO/DIS11926-1 FEMALE THREAD 	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!

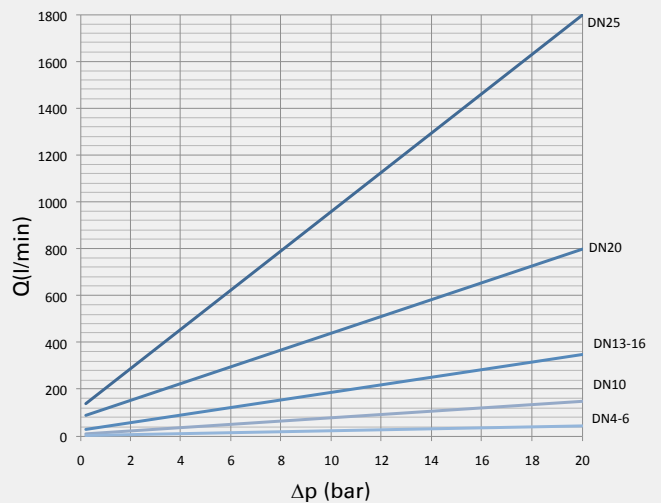
*Article usually in stock.

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.

