

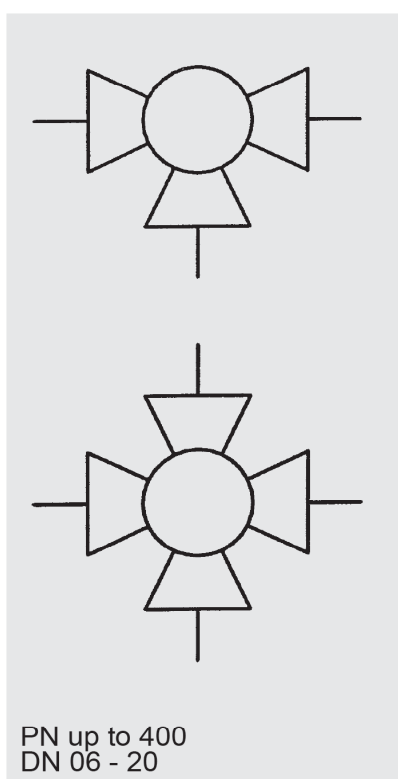
## HYDAC INTERNATIONAL



### Multiway manifold mounted ball valves KH3P / KH4P

**Model code**  
(also order example)

KH3P 16 L 1114 02 X ...



#### Designation

KH3P = 3-way manifold mounted ball valves  
KH4P = 4-way manifold mounted ball valves

#### Nominal bore (DN)

#### Ball bore

L, T, X  
(according to table on next page)

#### Materials

*Housing, blanking plug, screw plug*

1 = steel  
3 = stainless steel

*Ball spindle*

1 = steel  
3 = stainless steel

*Ball seal*

1 = POM (polyacetal)

*Soft seal*

4 = FKM (Viton)  
(other materials on request)

#### Handle

09 = without handle  
02 = aluminium clamped handle, cranked

#### Series

(determined by manufacturer)

#### Special model

SO ... = special model to customer specifications  
180° = 180° switch

(Please see examples on the next page)

## Standard types

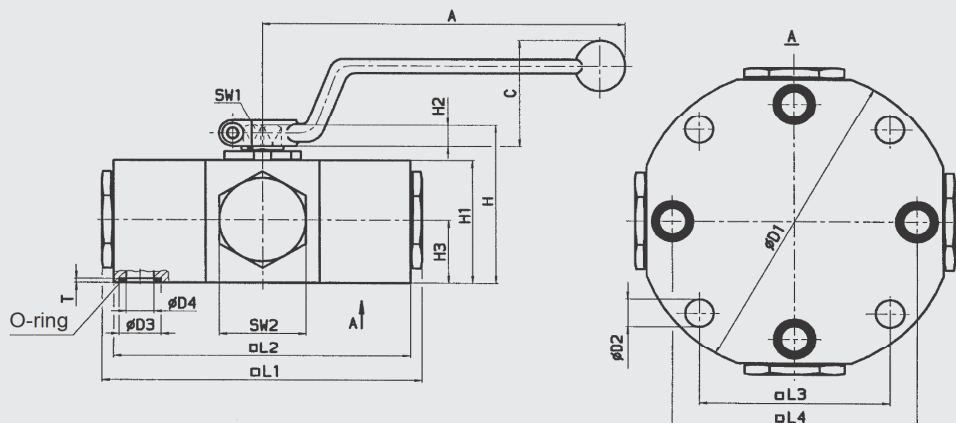
	Ball bore	Switch	Function diagram	SO ... Model
<b>KH3P</b>	L	0° - 90°		—
	T	0° - 45°		45 Grad
	T	0° - 90°		—
	T	0° - 90° - 180°		180 Grad
	L	0° - 45° - 90°		SO 378
	T	0° - 45° - 90°		SO 379
<b>KH4P</b>	T	0° - 90°		—
	X	0° - 45°		45 Grad
	X	0° - 90°		—
	L	0° - 90° - 180°		180 Grad
	T	0° - 90° - 180°		180 Grad
	X	0° - 45° - 90°		SO 385
	T	0° - 45° - 90°		SO 389

\* - detent position at 45°

--- undefined switching position

Other models or special ball bores on request

## 3-way and 4-way manifold mounted ball valve with cranked aluminium handle

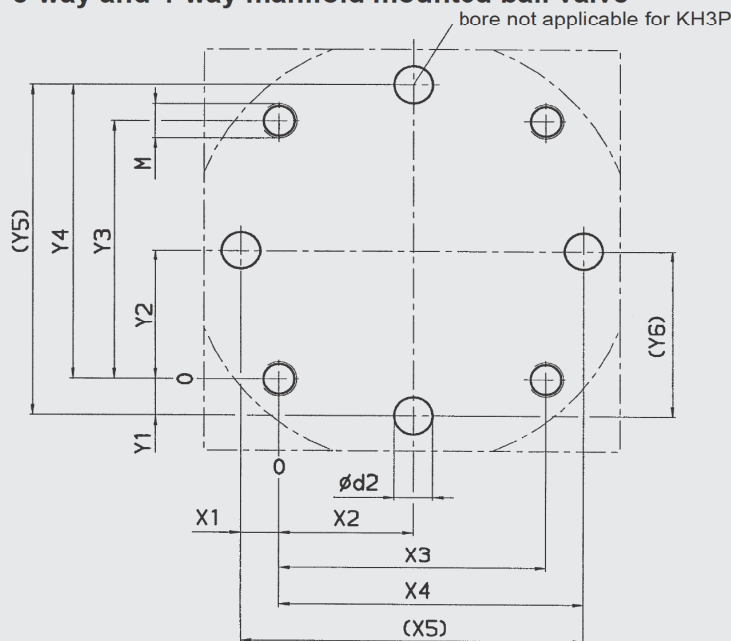


DN	Int. diam.	L1	L2	L3	L4	H	H1	H2	H3	D1	D2	D3	D4	SW 1	SW 2	T
	L - T - X															
06	5 5 4.5	103	90	70	68.6	57	40	11	22	--	6.5	11.7	6	12	27	1.9
10	9 9 6	113	100	80	81	67.5	50	11.5	27	--	9	14.7	8	14	30	1.9
16	12 12 10	152.5	140	90	115.4	77.5	60	11.5	31.5	150	13.5	19.7	13	14	41	2
20	18 18 14	184	170	100	137	92	73	11.5	36	180	13.5	28.8	18	17	46	2

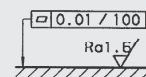
  

DN	A	C	O-ring	Weight (kg)	Pressure range PN [bar]
06	163	52	7.3 x 2.4	2.5	400
10	183	54	10.3 x 2.4	3.7	315
16	183	54	15 x 2.5	7.5	315
20	227	55	24 x 2.5	13.1	250

## Interface for 3-way and 4-way manifold mounted ball valve



Required surface finish  
on interface area



Dimensional tolerances  
ISO 2768 m

DN	Y1	Y2	Y3	Y4	Y5	Y6	X1	X2	X3	X4	X5	d2	M	Cheese-head screw ISO 4762 (property class)	Torque MA [Nm]*
06	0.7	35	70	69.3	68.6	34.3	0.7	35	70	69.3	68.6	6	M 6	M 6 - 12.9	10
10	-0.5	40	80	80.3	81.0	40.5	-0.5	40	80	80.5	81.0	8	M 8	M 8 - 12.9	20
16	-12.7	45	90	102.7	115.4	57.7	-12.7	45	90	102.7	115.4	13	M 12	M 12 - 12.9	65
20	-18.5	50	100	118.5	137.0	68.5	-18.5	50	100	118.5	137.0	18	M 12	M 12 - 12.9	70

\* Standard values for friction coefficient  $\mu$  0.14

EN 5.509.8/10.19

## Technical specifications

Mounting position:	No orientation restrictions
Ambient temperature:	-10 °C to +80 °C
Nominal pressure:	up to PN 400 (see pressure range)
Operating fluids:	Mineral oil to DIN 51524 part 1 and part 2 (other fluids on request)
Temperature of operating fluid:	-10 °C to +80 °C
<b>Spare parts:</b>	Seal kits available on request
<b>Accessories:</b>	All ball valves can be supplied with the following options: Actuator Limit controls Lock

## NOTE

The information in this brochure relates to the operating conditions and applications described. For applications and operating conditions not described, please contact the relevant technical department.

The operator is always responsible for determining the product suitability for the specific application. Quantified values for product characteristics are average values for a new product that undergo a time deterioration process.

Subject to technical modifications and errors.

EN 5.509.8/10.19