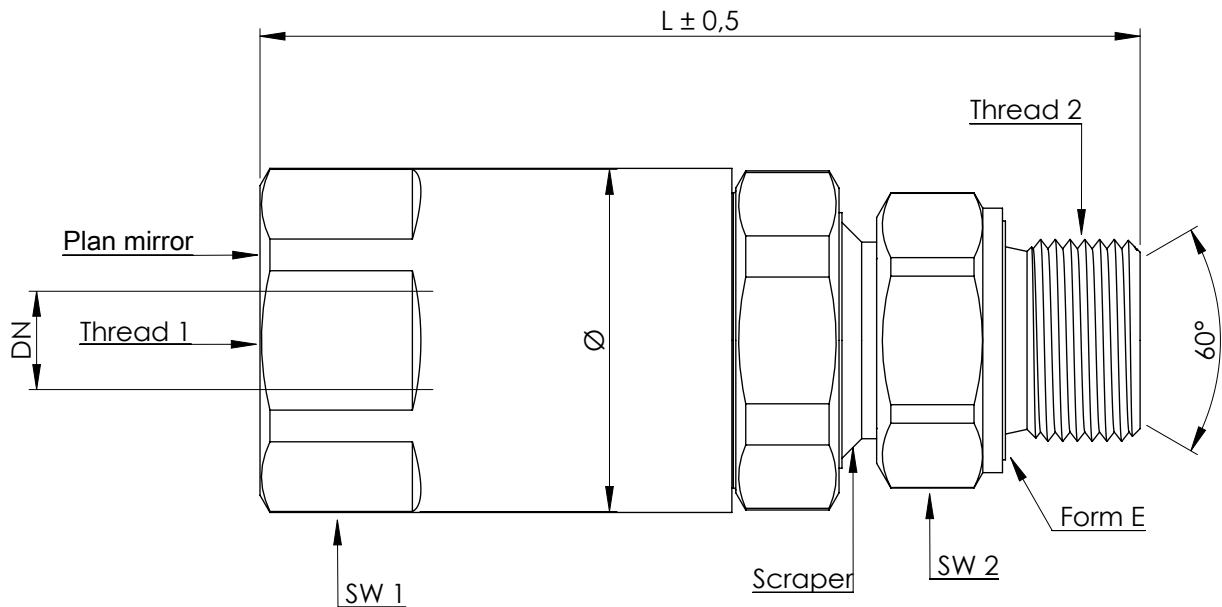


## Ball bearing swivel S - Series



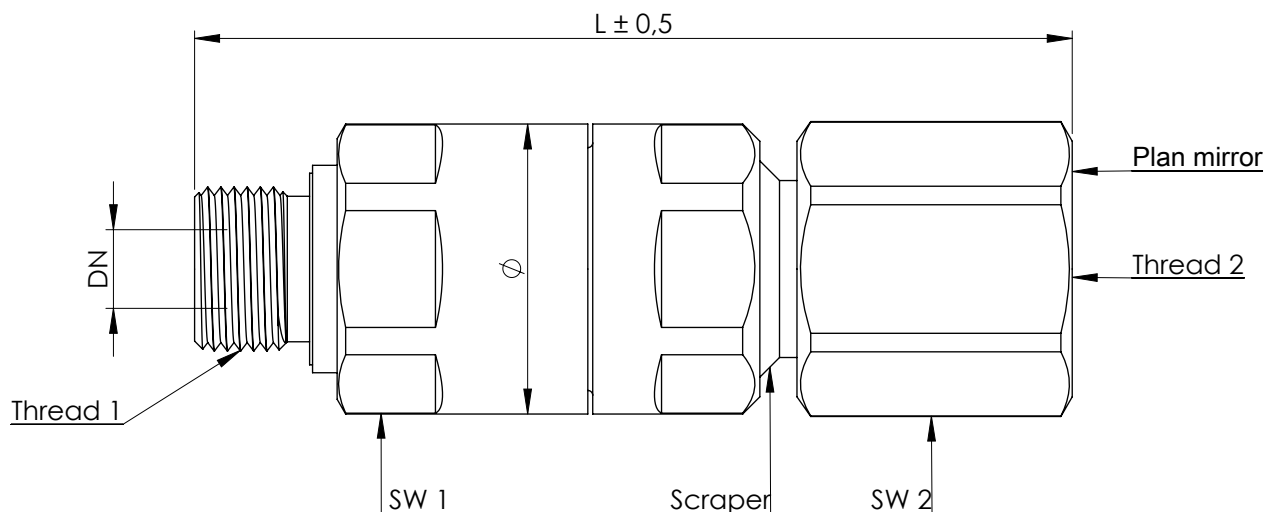
Steel parts surface Zn - Ni  
 Axle of untreated steel  
 Threaded bush with IGUS - plain GSM  
 Thrust ball bearings for low torque  
 Seal:  
 - dynamic O.Ring NBR + Teflon support ring  
 Scraper against external influences

Operating conditions:  
 Medium: Hydraulic oil  
 (Dirt particles size up to max. 25µ)  
 Working pressure: min. 10bar up to max. 420bar  
 Temperature: from -30°C to +95°C  
 Suitable for rotary and oscillating movements to a sliding speed maximum 0,025/sec., (but not constant)  
 (Rotary speed is dependent on the shaft diameter)

	L	Ø	DN	SW 1	SW 2	Thread 1	Thread 2	max. pressure
GK 1052/00S	88,5	29,5	06	27	24	IG 1/4"	AG 1/4"	420 bar
GK 1054/00S	88,5	29,5	08	27	24	IG 3/8"	AG 3/8"	420 bar
GK 1056/00S	89,5	35,0	10	32	27	IG 1/2"	AG 1/2"	420 bar
GK 1058/00S	96,0	35,0	10	32	32	IG 5/8"	AG 5/8"	420 bar
GK 1060/00S	116,5	49,5	17	36	36	IG 3/4"	AG 3/4"	420 bar
GK 1062/00S	118,5	49,5	17	46	41	IG 1"	AG 1"	420 bar

Issue: 07/2014  
 Technical changes are reserved to us.

## Ball bearing swivel S - Series



Steel parts surface Zn - Ni  
 Axle of untreated steel  
 Threaded bush with IGUS - plain GSM  
 Thrust ball bearings for low torque  
 Seal:  
 - dynamic O.Ring NBR + Teflon support ring  
 Scraper against external influences

### Operating conditions:

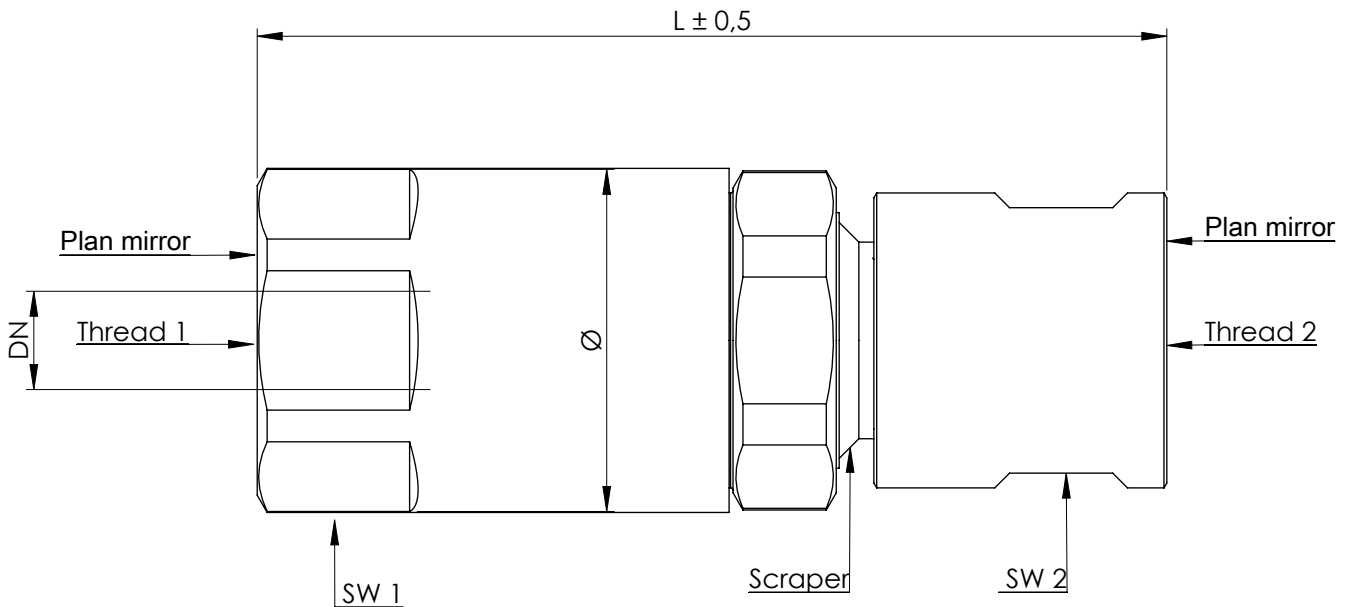
Medium: Hydraulic oil  
 (Dirt particles size up to max. 25µ)  
 Working pressure: min. 10bar up to max. 420bar  
 Temperature: from -30°C to +95°C  
 Suitable for rotary and oscillating movements to a sliding speed maximum 0,025m/sec., (but not constant)  
 (Rotary speed is dependent on the shaft diameter)

	L	Ø	DN	SW 1	SW 2	Thread 1	Thread 2	max. pressure
* GK 1201/00S	89,5	29,5	06	27	24	AG 1/4"	IG 1/4"	420 bar
* GK 1202/00S	89,5	29,5	08	27	27	AG 3/8"	IG 3/8"	420 bar
GK 1203/00S	91,5	35,0	10	32	27	AG 1/2"	IG 1/2"	420 bar
GK 1204/00S	122,0	49,5	17	46	36	AG 3/4"	IG 3/4"	420 bar
GK 1205/00S	122,0	49,5	17	46	41	AG 1"	IG 1"	420 bar

\* Adapter is made of hexagonal material

Issue: 07/2014  
 Technical changes are reserved to us.

### Ball bearing swivel S - Series



Steel parts surface Zn - Ni  
 Axle of untreated steel  
 Threaded bush with IGUS - plain GSM  
 Thrust ball bearings for low torque  
 Seal:  
 - dynamic O.Ring NBR + Teflon support ring  
 Scraper against external influences

Operating conditions:

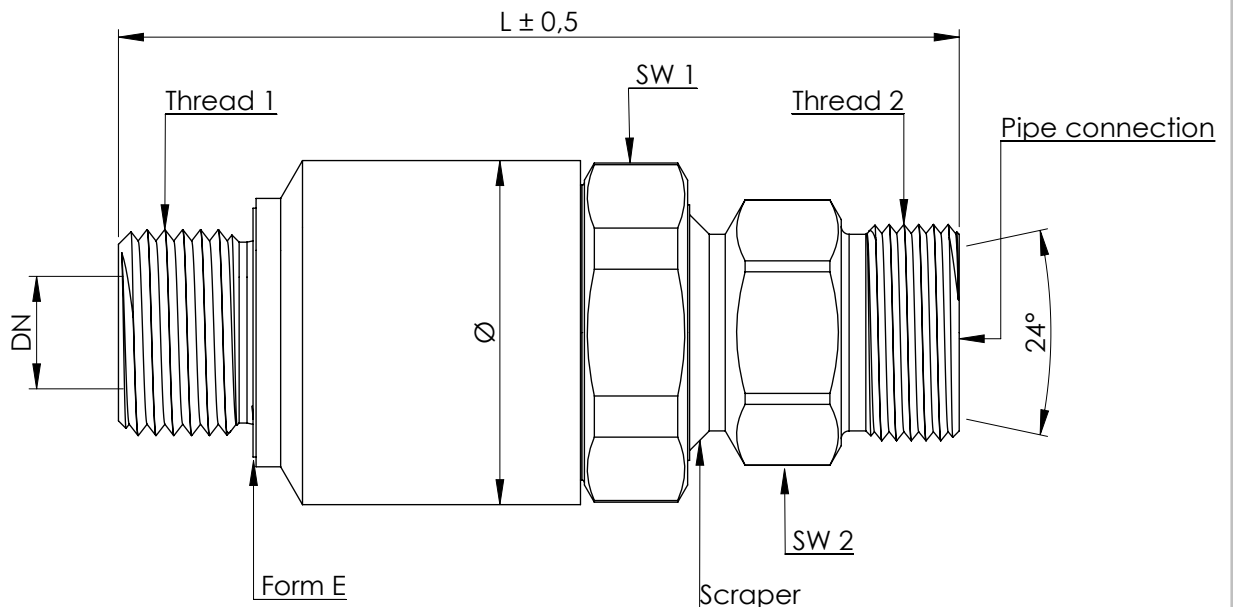
Medium: Hydraulic oil  
 (Dirt particles size up to max. 25µ)  
 Working pressure: min. 10bar up to max. 420bar  
 Temperature: from -30°C to +95°C  
 Suitable for rotary and oscillating movements to a sliding speed maximum 0,025m/sec., (but not constant)  
 (Rotary speed is dependent on the shaft diameter)

	L	Ø	DN	SW 1	SW 2	Thread 1	Thread 2	max. pressure
*GK 1100/00S*	86,5	29,5	06	27	19	IG 1/8"	IG 1/8"	420 bar
*GK 1102/00S*	89,5	29,5	08	27	24	IG 1/4"	IG 1/4"	420 bar
*GK 1104/00S*	89,5	29,5	08	27	27	IG 3/8"	IG 3/8"	420 bar
GK 1106/00S	93,0	35,0	10	32	30	IG 1/2"	IG 1/2"	420 bar
GK 1108/00S	93,0	35,0	10	32	32	IG 5/8"	IG 5/8"	420 bar
GK 1110/00S	123,5	49,5	17	36	36	IG 3/4"	IG 3/4"	420 bar
GK 1112/00S	123,5	49,5	17	46	41	IG 1"	IG 1"	420 bar

\* Adapter is made of hexagonal material

Issue: 07/2014  
 Technical changes are reserved to us.

## Ball bearing swivel S - Series



Steel parts surface Zn - Ni  
 Axle of untreated steel  
 Threaded bush with IGUS - plain GSM  
 Thrust ball bearings for low torque  
 Seal:  
 - dynamic O.Ring NBR + Teflon support ring  
 Scraper against external influences

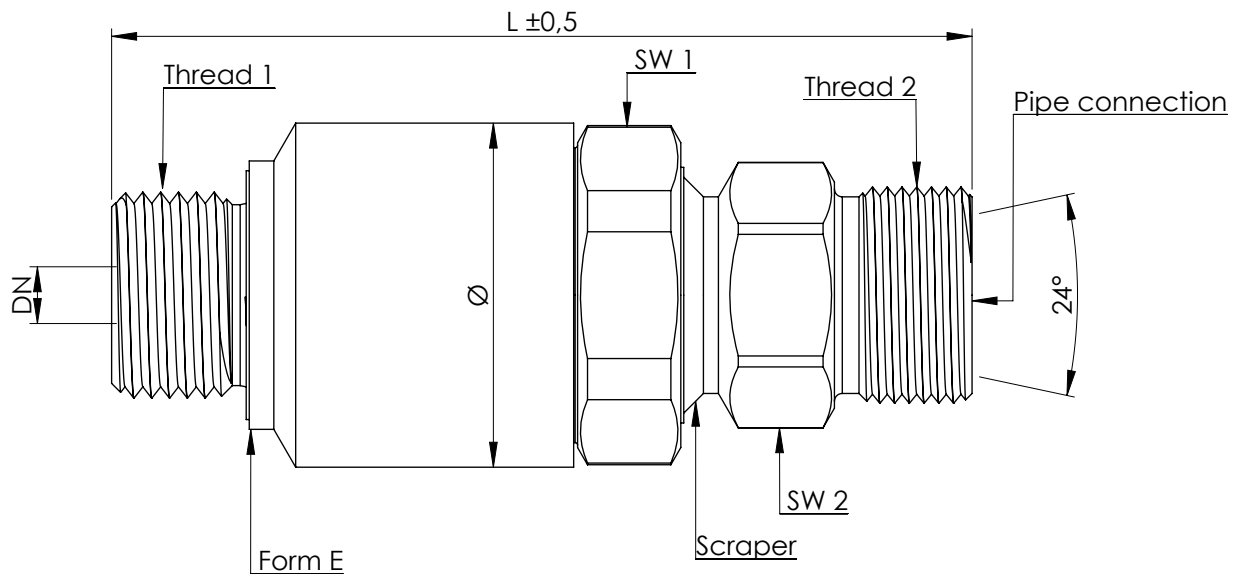
**Operating conditions:**  
 Medium: Hydraulic oil  
 (Dirt particles size up to max. 25µ)  
 Working pressure: min. 10bar up to max. 420bar  
 Temperature: from -30°C to +95°C  
 Suitable for rotary and oscillating movements to a sliding speed maximum 0,025m/sec., (but not constant)  
 (Rotary speed is dependent on the shaft diameter)

	L	Ø	DN	SW 1	SW 2	Thread 1	Thread 2	Pipe connection	max. pressure
GK 1437/00S	81,0	29,5	04	27	19	AG 1/4"	M12 x 1,5	6L	420 bar
GK 1438/00S	81,0	29,5	06	27	19	AG 1/4"	M14 x 1,5	8L	420 bar
GK 1450/00S	81,0	29,5	08	27	19	AG 3/8"	M16 x 1,5	10L	420 bar
GK 1451/00S	81,0	29,5	10	27	19	AG 3/8"	M18 x 1,5	12L	420 bar
GK 1454/00S	85,5	35,0	10	32	22	AG 1/2"	M18 x 1,5	12L	420 bar
GK 1455/00S	82,5	29,5	06	27	19	AG 1/4"	M16 x 1,5	10L	420 bar
GK 1459/00S	85,5	35,0	10	32	24	AG 1/2"	M22 x 1,5	15L	420 bar
*GK 1461/00S*	109,0	49,5	16	46	36	AG 3/4"	M26 x 1,5	18L	420 bar
GK 1462/00S	85,5	35,0	10	32	27	AG 1/2"	M26 x 1,5	18L	420 bar
*GK 1466/00S*	111,0	49,5	17	46	36	AG 3/4"	M30 x 2,0	22L	420 bar

\* On the outer part is a hexagonal milled

Issue: 07/2014  
 Technical changes are reserved to us.

## Ball bearing swivel S - Series



Steel parts surface Zn - Ni  
 Axle of untreated steel  
 Threaded bush with IGUS - plain GSM  
 Thrust ball bearings for low torque  
 Seal:  
 - dynamic O.Ring NBR + Teflon support ring  
 Scraper against external influences

### Operating conditions:

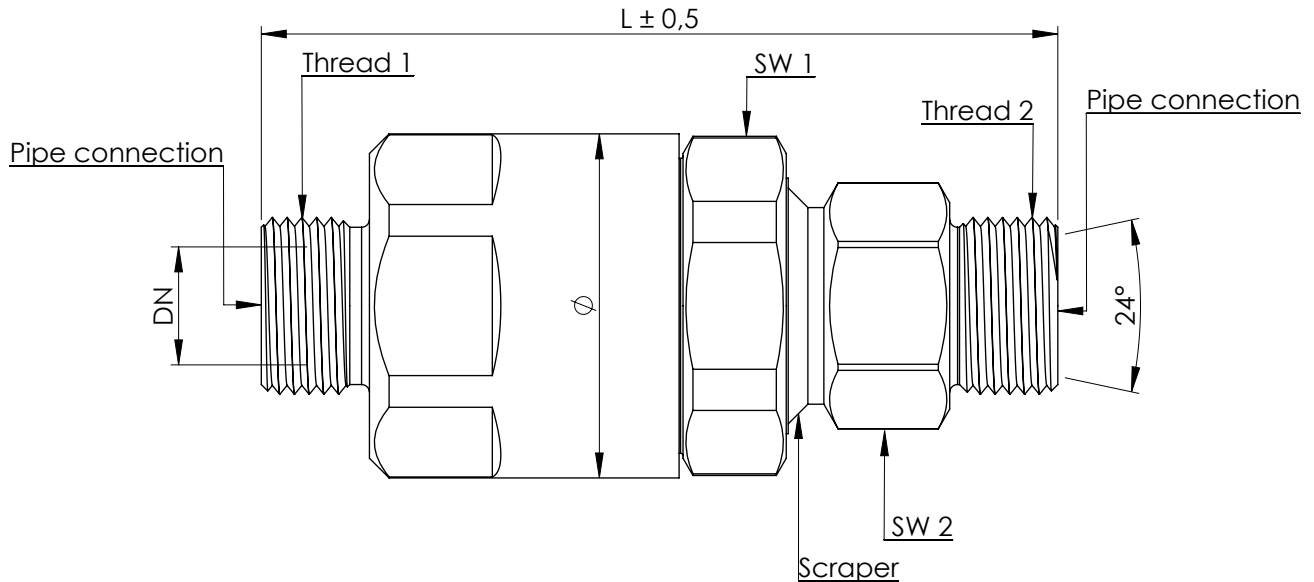
Medium: Hydraulic oil  
 (Dirt particles size up to max. 25µ)  
 Working pressure: min. 10bar up to max. 420bar  
 Temperature: from -30°C to +95°C  
 Suitable for rotary and oscillating movements to a sliding speed maximum 0,025m/sec., (but not constant)  
 (Rotary speed is dependent on the shaft diameter)

	L	Ø	DN	SW 1	SW 2	Thread 1	Thread 2	Pipe connection	max. pressure
GK 1436/00S	83,0	29,5	03	27	19	AG 1/4"	M14 x 1,5	6S	420 bar
GK 1449/00S	83,0	29,5	04	27	19	AG 1/4"	M16 x 1,5	8S	420 bar
GK 1446/00S	84,5	29,5	06	27	19	AG 3/8"	M18 x 1,5	10S	420 bar
GK 1456/00S	86,5	35,0	08	32	24	AG 1/2"	M20 x 1,5	12S	420 bar
GK 1458/00S	87,5	35,0	10	32	24	AG 1/2"	M22 x 1,5	14S	420 bar
GK 1460/00S	87,5	35,0	10	32	24	AG 1/2"	M24 x 1,5	16S	420 bar
*GK 1465/00S*	113,0	49,5	16	46	36	AG 3/4"	M30 x 2,0	20S	420 bar
*GK 1471/00S*	115,0	49,5	17	46	36	AG 3/4"	M36 x 2,0	25S	420 bar
*GK 1479/00S*	115,0	49,5	17	46	36	AG 1"	M36 x 2,0	25S	420 bar

\* On the outer part is a hexagonal milled

Issue: 07/2014  
 Technical changes are reserved to us.

## Ball bearing swivel S - Series



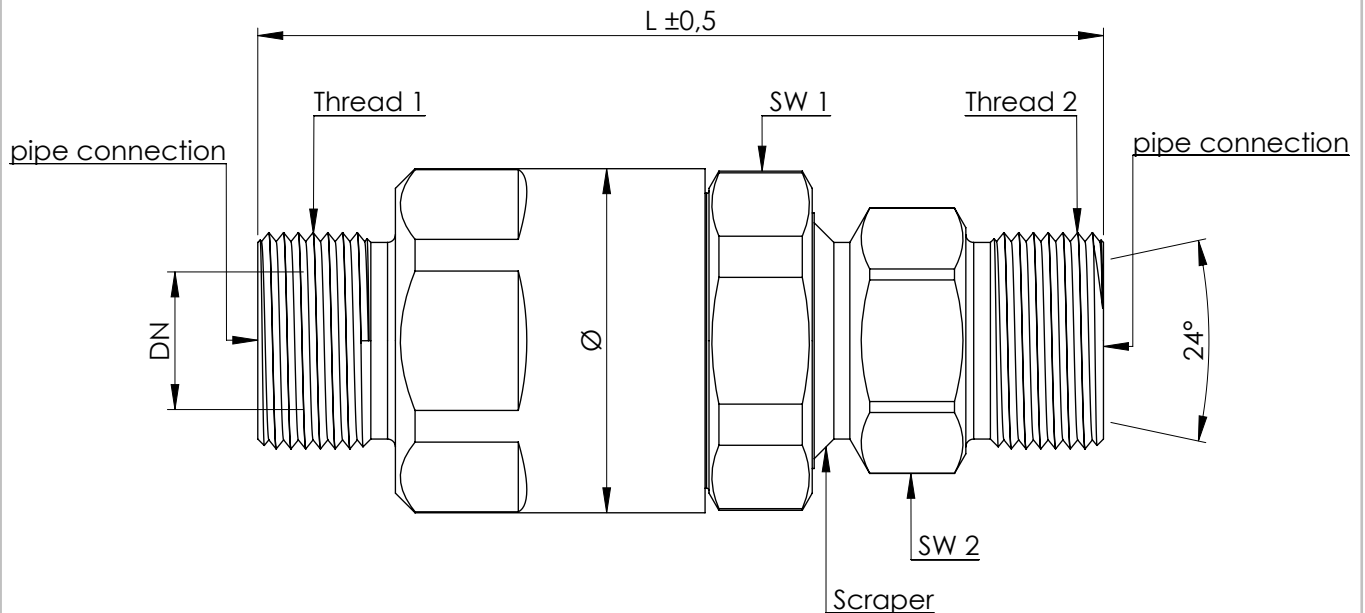
Steel parts surface Zn - Ni  
 Axle of untreated steel  
 Threaded bush with IGUS - plain GSM  
 Thrust ball bearings for low torque  
 Seal:  
 - dynamic O.Ring NBR + Teflon support ring  
 Scraper against external influences

Operating conditions:  
 Medium: Hydraulic oil  
 (Dirt particles size up to max. 25 $\mu$ )  
 Working pressure: min. 10bar up to max. 420bar  
 Temperature: from -30°C to +95°C  
 Suitable for rotary and oscillating movements to a sliding speed maximum 0,025m/sec., (but not constant)  
 (Rotary speed is dependent on the shaft diameter)

	L	Ø	DN	SW 1	SW 2	Thread 1	Thread 2	Pipe connection	max. pressure
GK 1410/00S	79,0	29,5	04	27	19	M12 x 1,5	M12 x 1,5	6L	420 bar
GK 1411/00S	79,0	29,5	06	27	19	M14 x 1,5	M14 x 1,5	8L	420 bar
GK 1412/00S	81,0	29,5	08	27	19	M16 x 1,5	M16 x 1,5	10L	420 bar
GK 1413/00S	81,0	35,0	10	32	22	M18 x 1,5	M18 x 1,5	12L	420 bar
GK 1414/00S	82,0	35,0	10	32	24	M22 x 1,5	M22 x 1,5	15L	420 bar
GK 1415/00S	102,0	49,5	16	46	36	M26 x 1,5	M26 x 1,5	18L	420 bar
GK 1416/00S	106,0	49,5	17	46	36	M30 x 2,0	M30 x 2,0	22L	420 bar
GK 1417/00S	106,5	54,5	24	50	41	M36 x 2,0	M36 x 2,0	28L	420bar

Issue: 07/2014  
 Technical changes are reserved to us.

## Ball bearing swivel S - Series



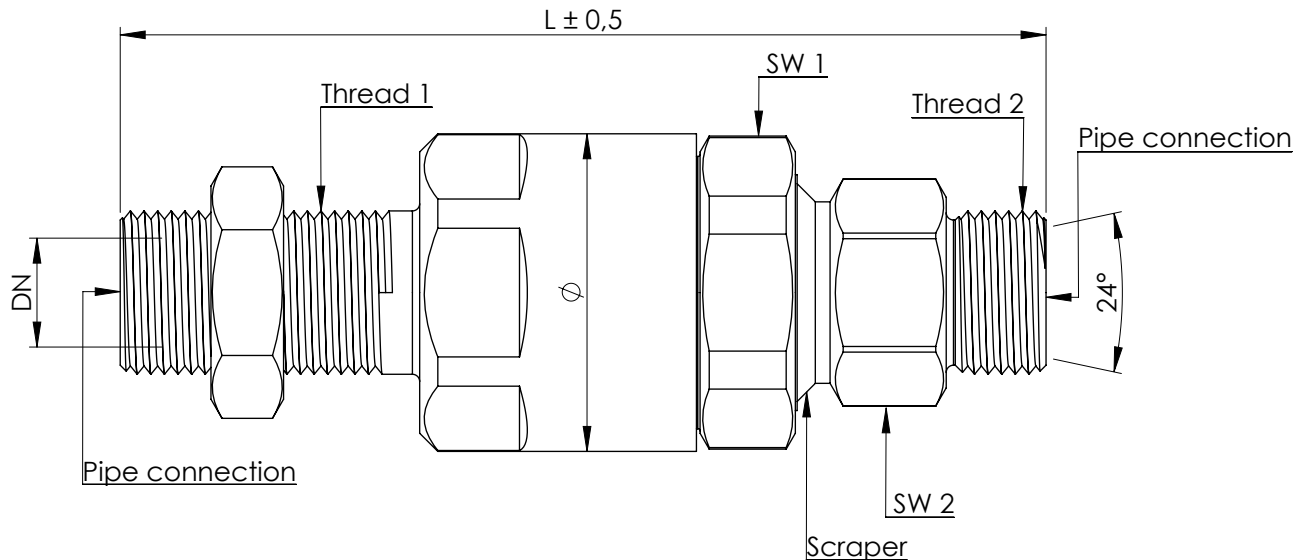
Steel parts surface Zn - Ni  
 Axle of untreated steel  
 Threaded bush with IGUS - plain GSM  
 Thrust ball bearings for low torque  
 Seal:  
 - dynamic O.Ring NBR + Teflon support ring  
 Scraper against external influences

Operating conditions:  
 Medium: Hydraulic oil  
 (Dirt particles size up to max. 25µ)  
 Working pressure: min. 10bar up to max. 420bar  
 Temperature: from -30°C to +95°C  
 Suitable for rotary and oscillating movements to a sliding speed maximum 0,025m/sec., (but not constant)  
 (Rotary speed is dependent on the shaft diameter)

	L	Ø	DN	SW 1	SW 2	Thread 1	Thread 2	Pipe connection	max. pressure
GK 1419/00S	84,5	29,5	03	27	19	M14 x 1,5	M14 x 1,5	6S	420 bar
GK 1420/00S	83,5	29,5	04	27	19	M16 x 1,5	M16 x 1,5	8S	420 bar
GK 1421/00S	84,5	29,5	06	27	19	M18 x 1,5	M18 x 1,5	10S	420 bar
GK 1422/00S	83,0	35,0	08	32	24	M20 x 1,5	M20 x 1,5	12S	420 bar
GK 1423/00S	86,0	35,0	10	32	24	M22 x 1,5	M22 x 1,5	14S	420 bar
GK 1424/00S	86,0	35,0	12	32	24	M24 x 1,5	M24 x 1,5	16S	420 bar
GK 1425/00S	110,0	49,5	16	46	36	M30 x 2,0	M30 x 2,0	20S	420 bar
GK 1426/00S	111,0	49,5	17	46	36	M36 x 2,0	M36 x 2,0	25S	420 bar

Issue: 07/2014  
 Technical changes are reserved to us.

## Ball bearing swivel S - Series



Steel parts surface Zn - Ni  
Axle of untreated steel  
Threaded bush with IGUS - plain GSM  
Thrust ball bearings for low torque  
Seal:  
- dynamic O.Ring NBR + Teflon support ring  
Scraper against external influences

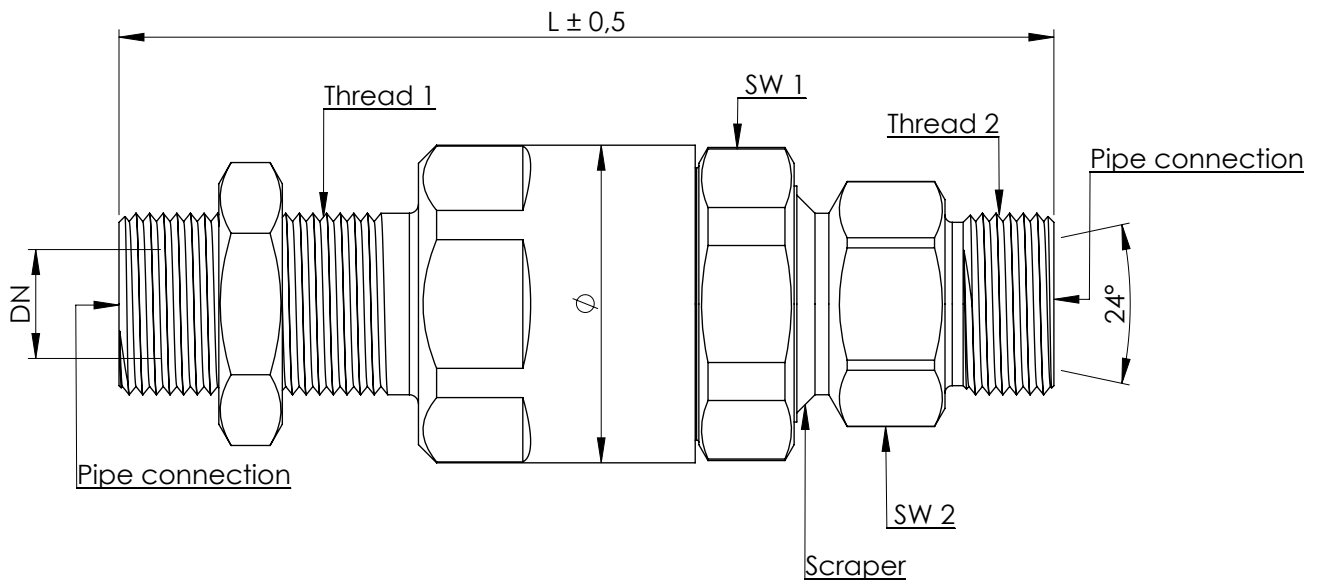
**Operating conditions:**  
Medium: Hydraulic oil  
(Dirt particles size up to max. 25µ)  
Working pressure: min. 10bar up to 420bar  
Temperature: from -30°C to +95°C  
Suitable for rotary and oscillating movements to a sliding speed maximum 0,025m/sec., (but not constant)  
(Rotary speed is dependent on the shaft diameter)

	L	Ø	DN	SW 1	SW 2	Thread 1	Thread 2	Pipe connection	max. pressure
GK 1501/00S	92,5	29,5	08	27	19	M16 x 1,5	M16 x 1,5	10L	420 bar
GK 1503/00S	95,5	29,5	06	27	19	M14 x 1,5	M14 x 1,5	8L	420 bar
GK 1508/00S	102,0	35,0	10	32	22	M18 x 1,5	M18 x 1,5	12L	420 bar
GK 1511/00S	102,0	35,0	10	32	24	M22 x 1,5	M22 x 1,5	15L	420 bar
GK 1515/00S	129,5	49,5	15	46	36	M26 x 1,5	M26 x 1,5	18L	420 bar
GK 1520/00S	132,0	49,5	17	46	36	M30 x 2,0	M30 x 2,0	22L	420 bar
GK 1523/00S	132,5	54,5	25	50	41	M36 x 2,0	M36 x 2,0	28L	420 bar

Issue: 06/2015  
Technical changes are reserved to us.



## Ball bearing swivel S - Series



Steel parts surface Zn - Ni  
 Axle of untreated steel  
 Threaded bush with IGUS - plain GSM  
 Thrust ball bearings for low torque  
 Seal:  
 - dynamic O.Ring NBR + Teflon support ring  
 Scraper against external influences

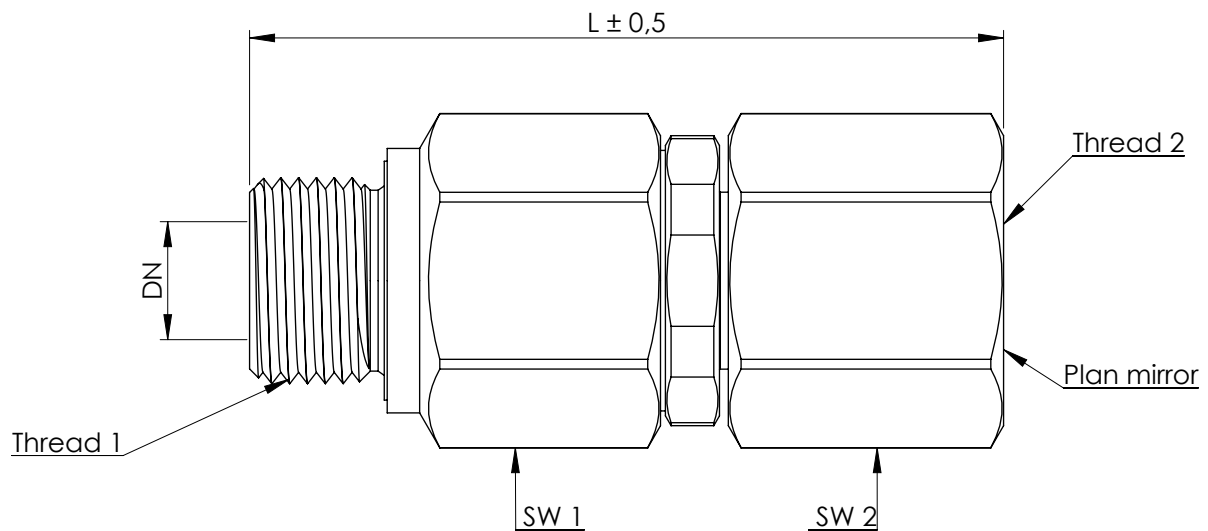
**Operating conditions:**

Medium: Hydraulic oil  
 (Dirt particles size up to max. 25µ)  
 Working pressure: min. 10bar up to max. 420bar  
 Temperature: from -30°C to +95°C  
 Suitable for rotary and oscillating movements to a  
 sliding speed maximum 0,025m/sec., (but not constant)  
 (Rotary speed is dependent on the shaft diameter)

	L	Ø	DN	SW 1	SW 2	Thread 1	Thread 2	Pipe connection	max. pressure
GK 1502/00S	97,5	29,5	05	27	19	M14 x 1,5	M14 x 1,5	6S	420 bar
GK 1505/00S	98,5	29,5	04	27	19	M16 x 1,5	M16 x 1,5	8S	420 bar
GK 1507/00S	103,5	29,5	07	27	19	M18 x 1,5	M18 x 1,5	10S	420 bar
GK 1510/00S	103,0	35,0	08	32	24	M20 x 1,5	M20 x 1,5	12S	420 bar
GK 1512/00S	104,0	35,0	10	32	24	M22 x 1,5	M22 x 1,5	14S	420 bar
GK 1514/00S	104,0	35,0	12	32	24	M24 x 1,5	M24 x 1,5	16S	420 bar
GK 1518/00S	134,0	49,5	16	46	36	M30 x 2,0	M30 x 2,0	20S	420 bar
GK 1522/00S	145,0	49,5	17	46	36	M36 x 2,0	M36 x 2,0	25S	420 bar

Issue: 07/2014  
 Technical changes are reserved to us.

## Ball bearing swivel N - Series



Steel parts surface Zn - Ni  
Axle steel hardened and ground  
Hardened steel threaded bush  
Thrust ball bearings for low torque  
Seal:  
- dynamic O.Ring NBR + Teflon support ring  
O.Ring against external influences

Operating conditions:  
Medium: Hydraulic oil  
(Dirt particles size up to max. 25 $\mu$ )  
Working pressure: min. 10bar up to max. 350bar  
Temperature: from -30°C to +95°C  
Suitable for rotary and oscillating movements to a sliding speed maximum 0,025m/sec., (but not constant)  
(Rotary speed is dependent on the shaft diameter)

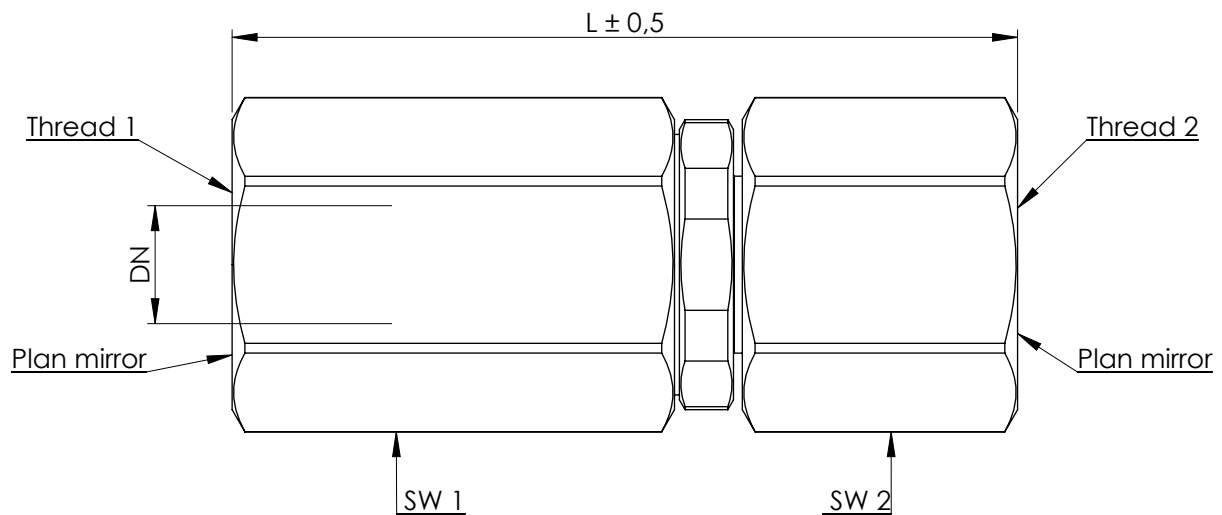
	L	DN	SW 1	SW 2	Thread 1	Thread 2	max pressure
	65,5	06	22	22	AG 1/4"	IG 1/4"	350 bar
	76,0	7,5	30	27	AG 3/8"	IG 3/8"	350 bar
	79,0	11,5	30	30	AG 1/2"	IG 1/2"	350 bar
*	93,5	16	41	36	AG 3/4"	IG 3/4"	350bar
**	98,5	19	46	41	AG 1"	IG 1"	350bar
	113,5	30	60	55	AG 1 1/4"	IG 1 1/4"	250 bar
	115,0	30	60	60	AG 1 1/2"	IG 1 1/2"	250 bar

\* Outer part of round material with milled hexagon

\*\* Outer part of round material with milled hexagon  
Adapter from round material with 2 milled wrench flats

Issue: 07/2014  
Technical changes are reserved to us.

## Ball bearing swivel N - Series



Steel parts surface Zn - Ni  
 Axle steel hardened and ground  
 Hardened steel threaded bush  
 Thrust ball bearings for low torque  
 Seal:  
 - dynamic O.Ring NBR + Teflon support ring  
 O.Ring against external influences

Operating conditions:  
 Medium: Hydraulic oil  
 (Dirt particles size up to max. 25 $\mu$ )  
 Working pressure: min. 10bar up to max. 350bar  
 Temperature: from -30°C to +95°C  
 Suitable for rotary and oscillating movements to a sliding speed maximum 0,025m/sec., (but not constant)  
 (Rotary speed is dependent on the shaft diameter)

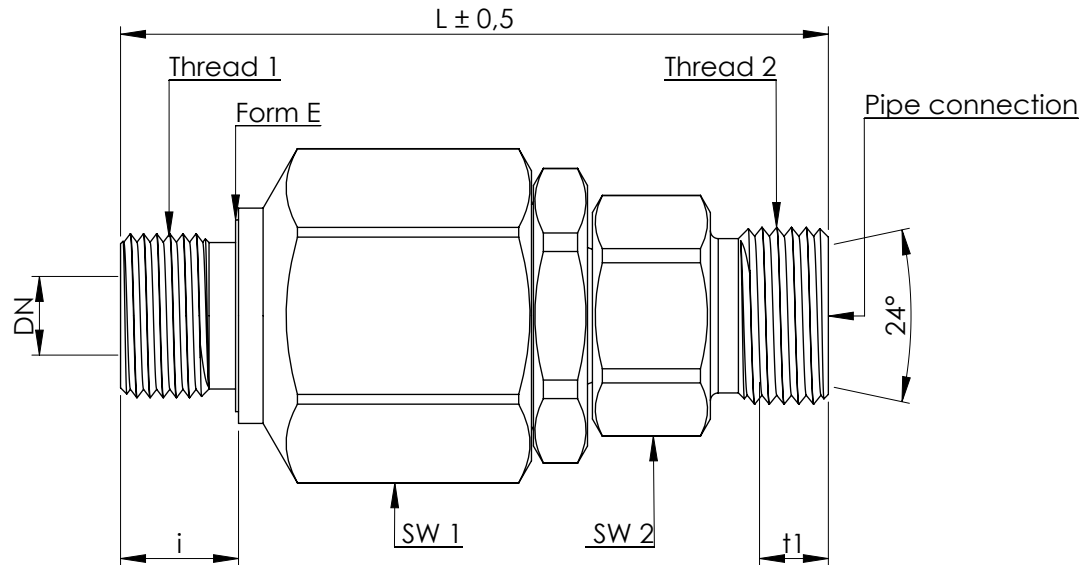
	L	DN	SW 1	SW 2	Thread 1	Thread 2	max pressure
	69,0	06	22	22	IG 1/4"	IG 1/4"	350 bar
	74,5	08	30	27	IG 3/8"	IG 3/8"	350 bar
	80,0	11,5	30	30	IG 1/2"	IG 1/2"	350 bar
*	90,0	19	46	41	IG 3/4"	IG 3/4"	350 bar
**	94,0	19	46	41	IG 1"	IG 1"	350 bar
	113,0	30	60	55	IG 1 1/4"	IG 1 1/4"	250 bar
	115,0	30	60	60	IG 1 1/2"	IG 1 1/2"	250 bar

\* Outer part of round material with milled hexagon

\*\* Outer part of round material with milled hexagon  
 Adapter from round material with 2 milled wrench flats

Issue: 07/2014  
 Technical changes are reserved to us.

## Ball bearing swivel N - Series



Steel parts surface Zn - Ni  
Axle steel hardened and ground  
Hardened steel threaded bush  
Thrust ball bearings for low torque  
Seal:  
- dynamic O.Ring NBR + Teflon support ring  
O.Ring against external influences

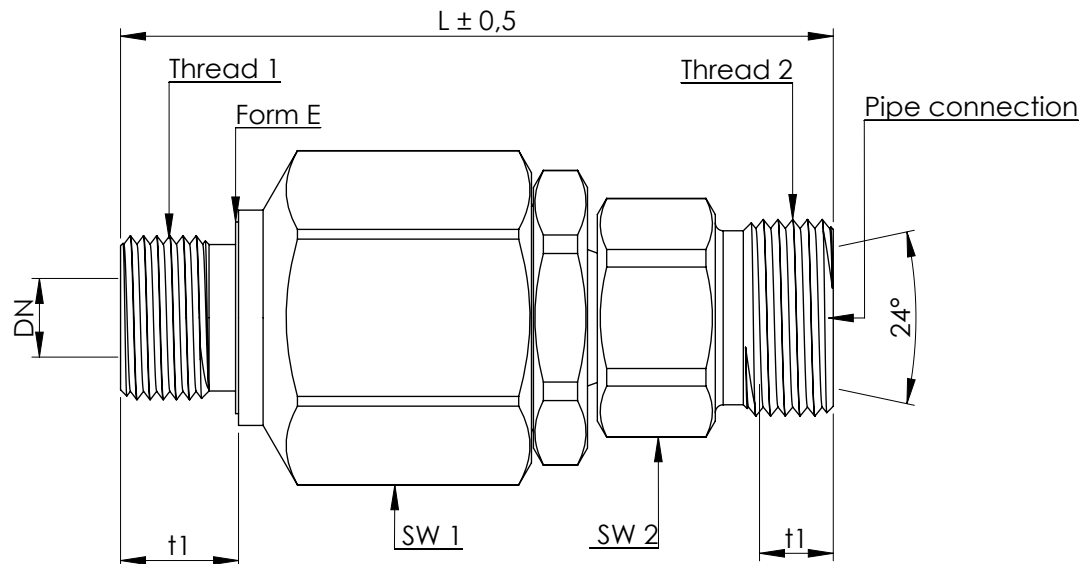
Operating conditions:  
Medium: Hydraulic oil  
(Dirt particles size up to max. 25µ)  
Working pressure: min. 10bar up to max. 350bar  
Temperature: from -30°C to +95°C  
Suitable for rotary and oscillating movements to a  
sliding speed maximum 0,025m/sec., (but not constant)  
(Rotary speed is dependent on the shaft diameter)

	L	i	DN	SW 1	SW 2	Thread 1	Thread 2	t1	Pipe connection	max. pressure
GK 1680/00N	59,5	12	04	22	17	AG 1/4"	M12 x 1,5	7,0	6L	350 bar
GK 1681/00N	59,5	12	06	22	17	AG 1/4"	M14 x 1,5	7,0	8L	350 bar
GK 1682/00N	71,0	12	08	30	19	AG 3/8"	M16 x 1,5	7,0	10L	350 bar
GK 1683/00N	72,0	12	08	30	22	AG 3/8"	M18 x 1,5	7,0	12L	350 bar
GK 1684/00N	72,5	14	12	30	24	AG 1/2"	M22 x 1,5	7,0	15L	350 bar
*GK 1685/00N*	90,5	16	15	41	36	AG 3/4"	M26 x 1,5	7,5	18L	350 bar
*GK 1685/67N*	92,5	16	16	41	36	AG 3/4"	M36 x 2,0	7,5	28L	350 bar
*GK 1686/00N*	90,5	16	16	41	36	AG 3/4"	M30 x 2,0	7,5	22L	350 bar
*GK 1687/00N*	92,5	18	19	46	36	AG 1"	M36 x 2,0	7,5	28L	350 bar
*GK 1687/65N*	90,5	18	15	46	36	AG 1"	M26 x 1,5	7,5	18L	350 bar
GK 1688/00N	106,0	20	30	60	55	AG 1 1/4"	M45 x 2,0	10,5	35L	250 bar
GK 1689/00N	108,5	22	32	60	55	AG 1 1/2"	M52 x 2,0	11,0	42L	250 bar

\* Outer part of round material with milled hexagon

Issue: 07/2014  
Technical changes are reserved to us.

## Ball bearing swivel N - Series



Steel parts surface Zn - Ni  
Axle steel hardened and ground  
Hardened steel threaded bush  
Thrust ball bearings for low torque  
Seal:  
- dynamic O.Ring NBR + Teflon support ring  
O.Ring against external influences

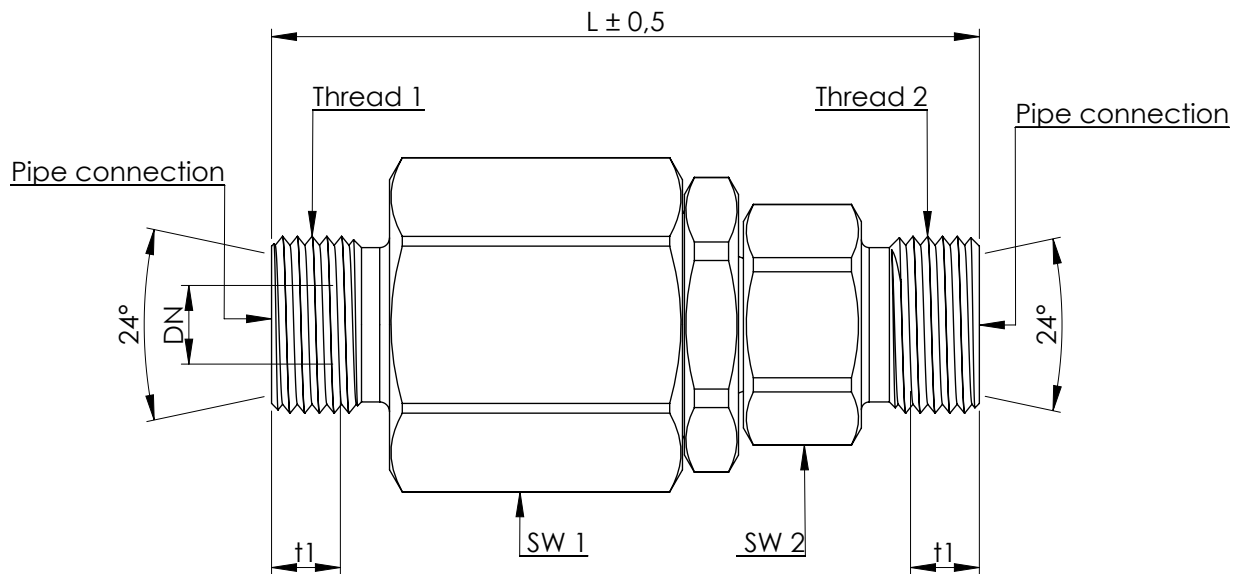
Operating conditions:  
Medium: Hydraulic oil  
(Dirt particles size up to max. 25 $\mu$ )  
Working pressure: min. 10bar up to max. 350bar  
Temperature: from -30°C to +95°C  
Suitable for rotary and oscillating movements to a sliding speed maximum 0,025m/sec., (but not constant)  
(Rotary speed is dependent on the shaft diameter)

	L	i	DN	SW 1	SW 2	Thread 1	Thread 2	t1	Pipe connection	max. pressure
GK 1690/00N	61,5	12	04	22	17	AG 1/4"	M14 x 1,5	7,0	6S	350 bar
GK 1691/00N	61,5	12	06	22	17	AG 1/4"	M16 x 1,5	7,0	8S	350 bar
GK 1693/00N	72,0	12	7,5	30	22	AG 3/8"	M20 x 1,5	7,0	12S	350 bar
GK 1694/00N	74,5	14	12	30	24	AG 1/2"	M24 x 1,5	8,5	16S	350 bar
*GK 1695/00N*	92,5	16	16	41	36	AG 3/4"	M30 x 2,0	10,5	20S	350 bar
*GK 1696/00N*	96,5	18	19	46	36	AG 1"	M36 x 2,0	12,0	25S	350 bar
GK 1697/00N	110,0	20	25	60	55	AG 1 1/4"	M42 x 2,0	13,5	30S	250 bar
GK 1698/00N	114,5	22	32	60	55	AG 1 1/2"	M52 x 2,0	16,0	38S	250 bar

\* Outer part of round material with milled hexagon

Issue: 07/2014  
Technical changes are reserved to us.

## Ball bearing swivel N - Series



Steel parts surface Zn - Ni  
Axle steel hardened and ground  
Hardened steel threaded bush  
Thrust ball bearings for low torque  
Seal:  
- dynamic O.Ring NBR + Teflon support ring  
O.Ring against external influences

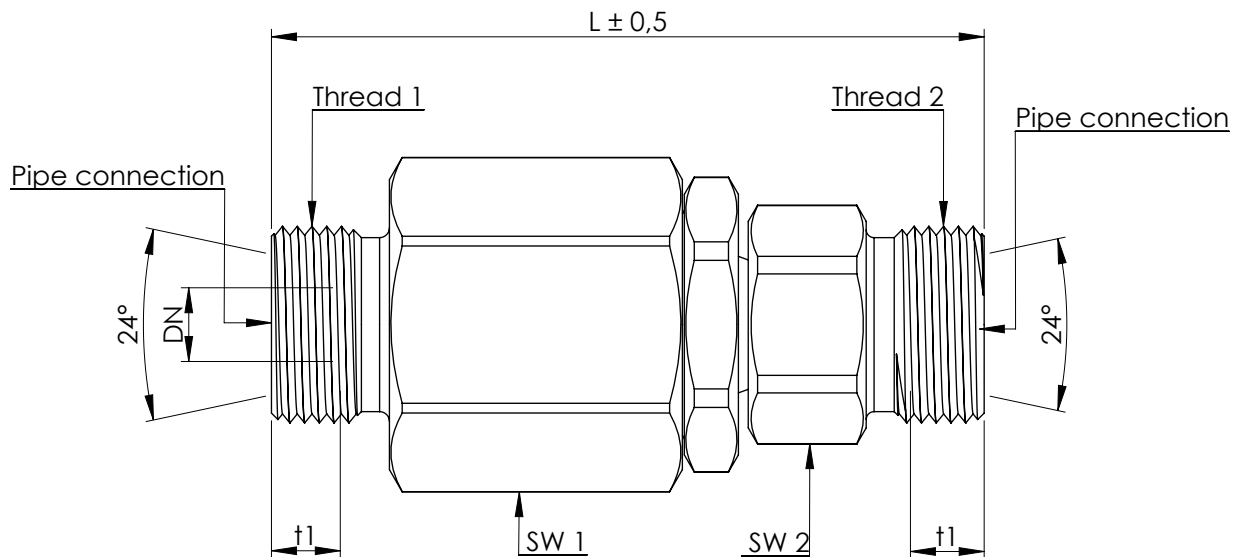
Operating conditions:  
Medium: Hydraulic oil  
(Dirt particles size up to max. 25µ)  
Working pressure: min. 10bar up to 350bar  
Temperature: from -30°C to +95°C  
Suitable for rotary and oscillating movements to a sliding speed maximum 0,025m/sec., (but not constant)  
(Rotary speed is dependent on the shaft diameter)

	L	t1	DN	SW 1	SW 2	Thread 1	Thread 2	Pipe connection	max. pressure	
	GK 1660/00N	57,5	7,0	04	22	17	M12 x 1,5	M12 x 1,5	6L	350 bar
	GK 1661/00N	57,5	7,0	06	22	17	M14 x 1,5	M14 x 1,5	8L	350 bar
	GK 1662/00N	70,0	7,0	08	30	19	M16 x 1,5	M16 x 1,5	10L	350 bar
	GK 1663/00N	72,0	7,0	08	30	22	M18 x 1,5	M18 x 1,5	12L	350 bar
	GK 1664/00N	71,5	7,0	12	30	24	M22 x 1,5	M22 x 1,5	15L	350 bar
*	GK 1665/00N	81,5	7,5	15	41	36	M26 x 1,5	M26 x 1,5	18L	350 bar
*	GK 1666/00N	86,5	7,5	19	41	36	M30 x 2,0	M30 x 2,0	22L	350 bar
*	GK 1667/00N	88,5	7,5	19	41	36	M36 x 2,0	M36 x 2,0	28L	350 bar
*	GK 1668/00N	102,0	10,5	30	60	55	M45 x 2,0	M45 x 2,0	35L	250 bar
*	GK 1669/00N	103,0	11,0	32	60	55	M52 x 2,0	M52 x 2,0	42L	250 bar

\* Outer part of round material with milled hexagon

Issue: 07/2014  
Technical changes are reserved to us.

## Ball bearing swivel N - Series



Steel parts surface Zn - Ni  
Axle steel hardened and ground  
Hardened steel threaded bush  
Thrust ball bearings for low torque  
Seal:  
- dynamic O.Ring NBR + Teflon support ring  
O.Ring against external influences

### Operating conditions:

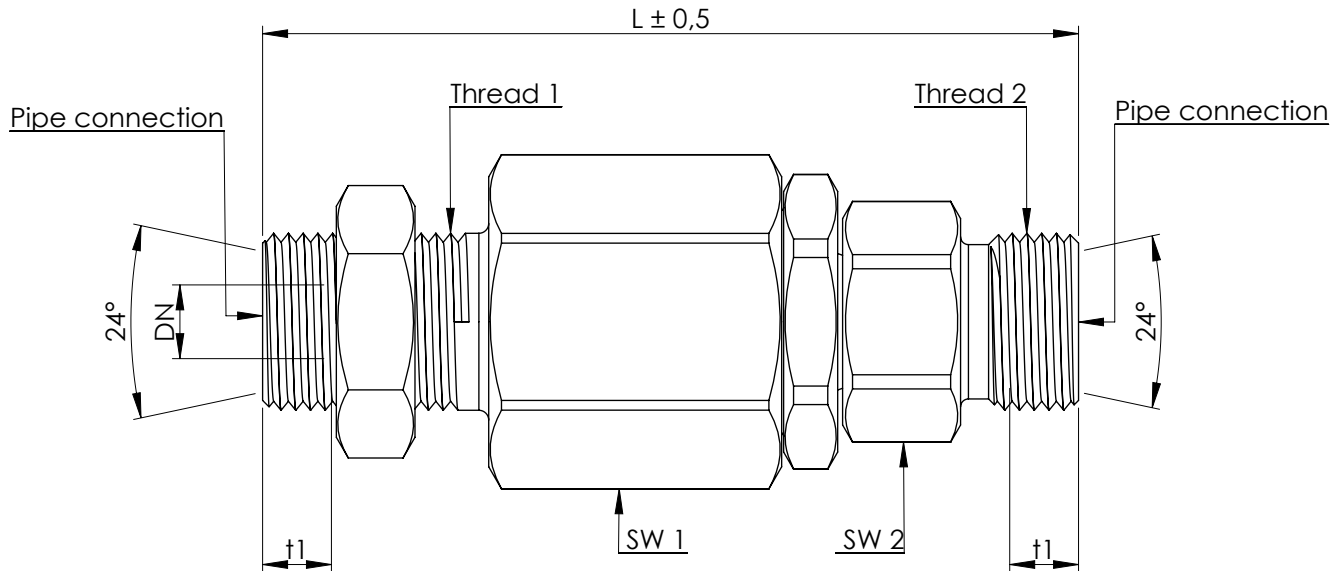
Medium: Hydraulic oil  
(Dirt particles size up to max. 25 $\mu$ )  
Working pressure: min. 10bar up to max. 350bar  
Temperature: from -30°C to +95°C  
Suitable for rotary and oscillating movements to a sliding speed maximum 0,025m/sec., (but not constant)  
(Rotary speed is dependent on the shaft diameter)

	L	t1	DN	SW 1	SW 2	Thread 1	Thread 2	Pipe connection	max. pressure	
	GK 1670/00N	61,5	7,0	04	22	17	M14 x 1,5	M14 x 1,5	6S	350 bar
	GK 1671/00N	61,5	7,0	06	22	17	M16 x 1,5	M16 x 1,5	8S	350 bar
	GK 1674/00N	74,5	8,5	12	30	24	M24 x 1,5	M24 x 1,5	16S	350 bar
	GK 1673/00N	72,0	7,5	7,5	30	22	M20 x 1,5	M20 x 1,2	12S	350 bar
*	GK 1675/00N	92,5	10,5	16	41	36	M30 x 2,0	M30 x 2,0	20S	350 bar
*	GK 1676/00N	96,5	12,0	19	41	36	M36 x 2,0	M36 x 2,0	25S	350 bar
*	GK 1677/00N	110,0	13,5	25	60	55	M42 x 2,0	M42 x 2,0	30S	250 bar
*	GK 1678/00N	115,0	16,0	32	60	55	M52 x 2,0	M52 x 2,0	38S	250 bar

\* Outer part of round material with milled hexagon

Issue: 07/2014  
Technical changes are reserved to us.

## Ball bearing swivel N - Series



Steel parts surface Zn - Ni  
Axle steel hardened and ground  
Hardened steel threaded bush  
Thrust ball bearings for low torque  
Seal:  
- dynamic O.Ring NBR + Teflon support ring  
O.Ring against external influences

Operating conditions:  
Medium: Hydraulic oil  
(Dirt particles size up to max. 25µ)  
Working pressure: min. 10bar up to max 350bar  
Temperature: from -30°C to +95°C  
Suitable for rotary and oscillating movements to a sliding speed maximum 0,025m/sec., (but not constant)  
(Rotary speed is dependent on the shaft diameter)

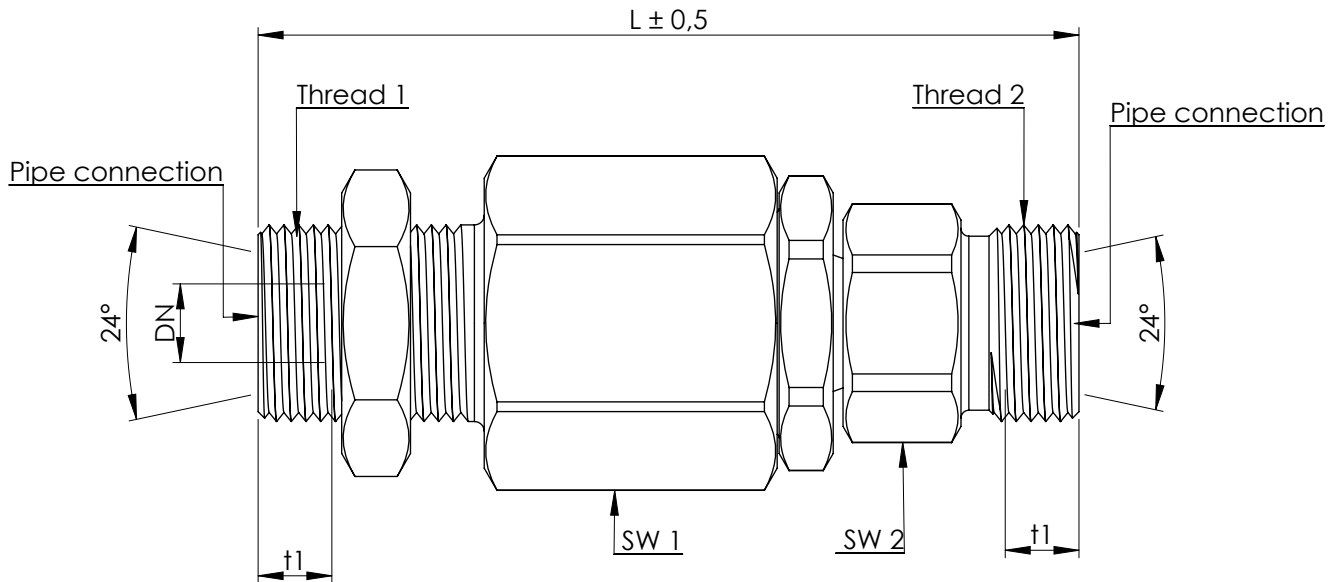
	L	t1	DN	SW 1	SW 2	Thread 1	Thread 2	Pipe connection	max. pressure	
	GK 1560/00N	70,5	7,0	04	22	17	M12 x 1,5	M12 x 1,5	6L	350 bar
	GK 1561/00N	70,5	7,0	06	22	17	M14 x 1,5	M14 x 1,5	8L	350 bar
	GK 1562/00N	82,0	7,0	7,5	30	19	M16 x 1,5	M16 x 1,5	10L	350 bar
	GK 1563/00N	83,0	7,0	7,5	30	22	M18 x 1,5	M18 x 1,5	12L	350 bar
*	GK 1564/00N	84,5	7,0	11,5	32	24	M22 x 1,5	M22 x 1,5	15L	350bar
*	GK 1565/00N	109,5	7,5	16	41	36	M26 x 1,5	M26 x 1,5	18L	350bar
*	GK 1566/00N	110,0	7,5	19	41	36	M30 x 2,0	M30 x 2,0	22L	350 bar
*	GK 1567/00N	114,5	7,5	19	41	36	M36 x 2,0	M36 x 2,0	28L	350 bar
*	GK 1568/00N	132,0	10,5	30	60	55	M45 x 2,0	M45 x 2,0	35L	250 bar
*	GK 1569/00N	133,5	11,0	32	60	55	M52 x 2,0	M52 x 2,0	42L	250 bar

\* Outer part of round material with milled hexagon

Issue: 07/2014  
Technical changes are reserved to us.



## Ball bearing swivel N - Series



Steel parts surface Zn - Ni  
Axle steel hardened and ground  
Hardened steel threaded bush  
Thrust ball bearings for low torque  
Seal:  
- dynamic O.Ring NBR + Teflon support ring  
O.Ring against external influences

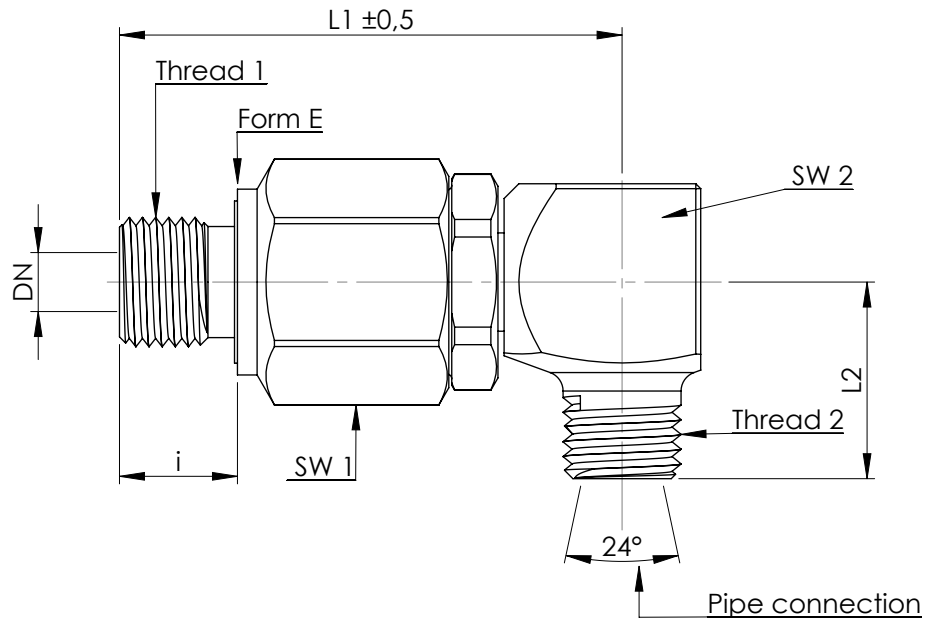
**Operating conditions:**  
Medium: Hydraulic oil  
(Dirt particles size up to max. 25µ)  
Working pressure: min. 10bar up to max. 350bar  
Temperature: from -30°C to +95°C  
Suitable for rotary and oscillating movements to a sliding speed maximum 0,025m/sec., (but not constant)  
(Rotary speed is dependent on the shaft diameter)

	L	t1	DN	SW 1	SW 2	Thread 1	Thread 2	Pipe connection	max. pressure
	72,5	7,0	04	22	17	M14 x 1,5	M14 x 1,5	6S	350 bar
	72,5	7,0	06	22	17	M16 x 1,5	M16 x 1,5	8S	350 bar
	86,5	8,5	11,5	30	24	M24 x 1,5	M24 x 1,5	16S	350bar
	83,0	7,5	7,5	30	22	M20 x 1,5	M20 x 1,5	12S	350 bar
*	115,5	10,5	16	41	36	M30 x 2,0	M30 x 2,0	20S	350bar
*	120,5	12,0	19	41	36	M36 x 2,0	M36 x 2,0	25S	350bar
*	134,0	13,5	25	60	55	M42 x 2,0	M42 x 2,0	30S	250 bar
*	139,5	16,0	32	60	55	M52 x 2,0	M52 x 2,0	38S	250 bar

\* Outer part of round material with milled hexagon

Issue: 07/2014  
Technical changes are reserved to us.

### Ball bearing swivel N - Series



Outer part and adapter steel surface Zn - Ni  
Axle steel hardened and ground  
Hardened steel threaded bush  
Thrust ball bearings for low torque  
Seal:  
- dynamic O.Ring NBR + Teflon support ring  
O.Ring against external influences

**Operating conditions:**

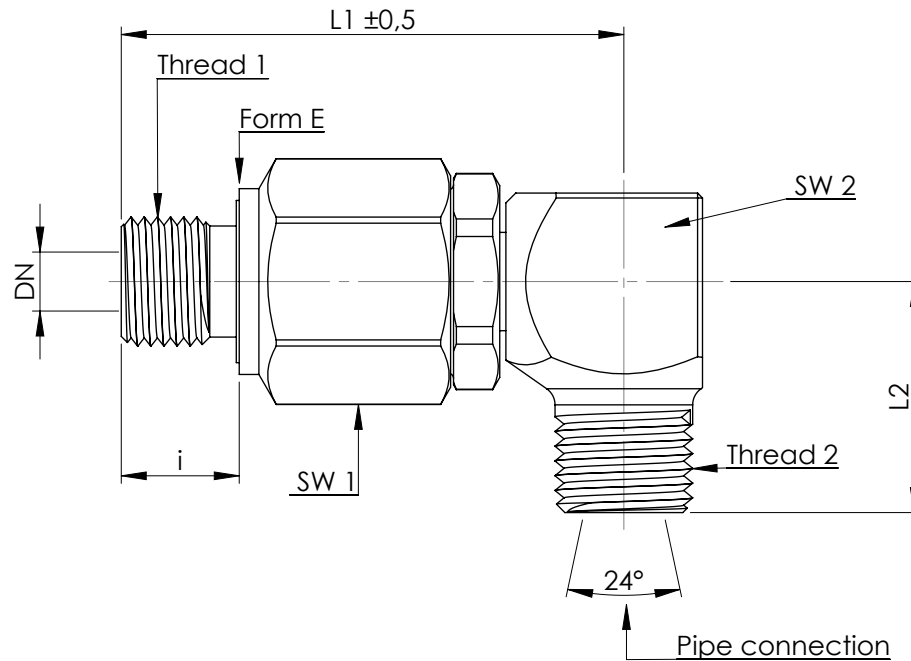
Medium: Hydraulic oil  
(Dirt particles size up to max. 25 $\mu$ )  
Working pressure: min. 10bar up to max. 350bar  
Temperature: from -30°C to +95°C  
Suitable for rotary and oscillating movements to a sliding speed maximum 0,025m/sec., (but not constant)  
(Rotary speed is dependent on the shaft diameter)

	L1	L2	DN	i	SW 1	SW 2	Thread 1	Thread 2	Pipe con.	max. pressure
GK 1780/00N	51,5	20,0	04	12	22	20	AG 1/4"	M12 x 1,5	6L	350 bar
GK 1781/00N	51,0	22,5	06	12	22	20	AG 1/4"	M14 x 1,5	8L	350 bar
GK 1782/00N	63,0	29,0	08	12	30	22	AG 3/8"	M16 x 1,5	10L	350bar
GK 1783/00N	63,0	29,0	08	12	30	22	AG 3/8"	M18 x 1,5	12L	350bar
GK 1784/1783N	63,0	29,0	10	14	30	22	AG 1/2"	M18 x 1,5	12L	350 bar
GK 1784/00N	63,0	29,0	10	14	30	22	AG 1/2"	M22 x 1,5	15L	350 bar
* GK 1785/00N	86,5	36,0	16	16	41	40	AG 3/4"	M26 x 1,5	18L	350bar
* GK 1786/00N	86,5	38,0	16	16	41	40	AG 3/4"	M30 x 2,0	22L	350bar
* GK 1787/00N	83,5	38,0	18	18	46	40	AG 1"	M36 x 2,0	28L	350bar
GK 1788/00N	109,0	45,0	30	20	60	60	AG 1 1/4"	M45 x 2,0	35L	250bar
GK 1789/00N	106,0	45,0	32	22	60	60	AG 1 1/2"	M52 x 2,0	42L	250bar

\* Outer part of round material with milled hexagon

Issue: 07/2014  
Technical changes are reserved to us.

### Ball bearing swivel N - Series



Outer part and adapter steel surface Zn - Ni  
Axle steel hardened and ground  
Hardened steel threaded bush  
Thrust ball bearings for low torque  
Seal:  
- dynamic O.Ring NBR + Teflon support ring  
O.Ring against external influences

**Operating conditions:**

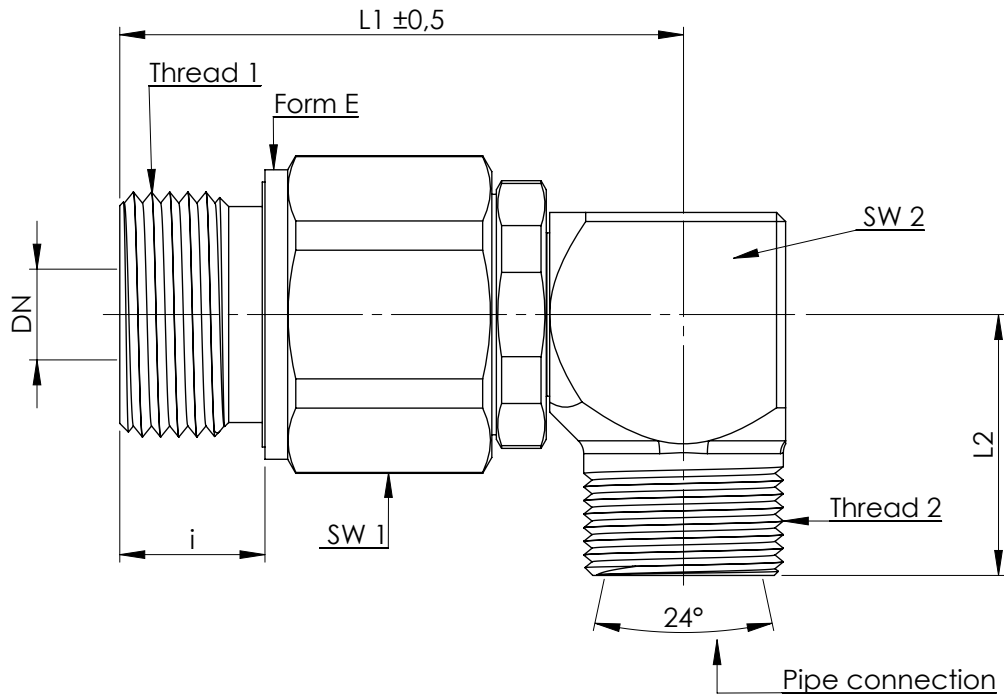
Medium: Hydraulic oil  
(Dirt particles size up to max. 25µ)  
Working pressure: min. 10bar up to max. 350bar  
Temperature: from -30°C to +95°C  
Suitable for rotary and oscillating movements to a sliding speed maximum 0,025m/sec., (but not constant)  
(Rotary speed is dependent on the shaft diameter)

	L1	L2	DN	i	SW 1	SW 2	Thread 1	Thread 2	Pipe con.	max. pressure
GK 1790/00N	51,0	23,5	03	12	22	20	AG 1/4"	M14 x 1,5	6S	350 bar
GK 1791/00N	51,0	23,5	04	12	22	20	AG 1/4"	M16 x 1,5	8S	350 bar
GK 1793/00N	63,0	29,0	7,5	12	30	22	AG 3/8"	M20 x 1,5	12S	350bar
GK 1794/00N	63,5	33,0	12	14	30	30	AG 1/2"	M24 x 1,5	16S	350 bar
* GK 1795/00N	83,0	39,5	16	16	41	40	AG 3/4"	M30 x 2,0	20S	350bar
* GK 1796/1795N	83,0	39,5	16	18	46	40	AG 1"	M30 x 2,0	20S	350bar
* GK 1796/00N	83,0	42,0	18	20	46	40	AG 1"	M36 x 2,0	25S	350bar
GK 1797/00N	102,5	49,0	25	20	60	60	AG 1 1/4"	M42 x 2,0	30S	250bar
GK 1798/00N	102,5	57,0	32	22	60	60	AG 1 1/2"	M52 x 2,0	38S	250bar

\* Outer part of round material with milled hexagon

Issue: 07/2014  
Technical changes are reserved to us.

### Ball bearing swivel N - Series



Outer part and adapter steel surface Zn - Ni  
 Axle steel hardened and ground  
 Hardened steel threaded bush  
 Thrust ball bearings for low torque  
 Seal:  
 - dynamic O.Ring NBR + Teflon support ring  
 O.Ring against external influences

**Operating conditions:**

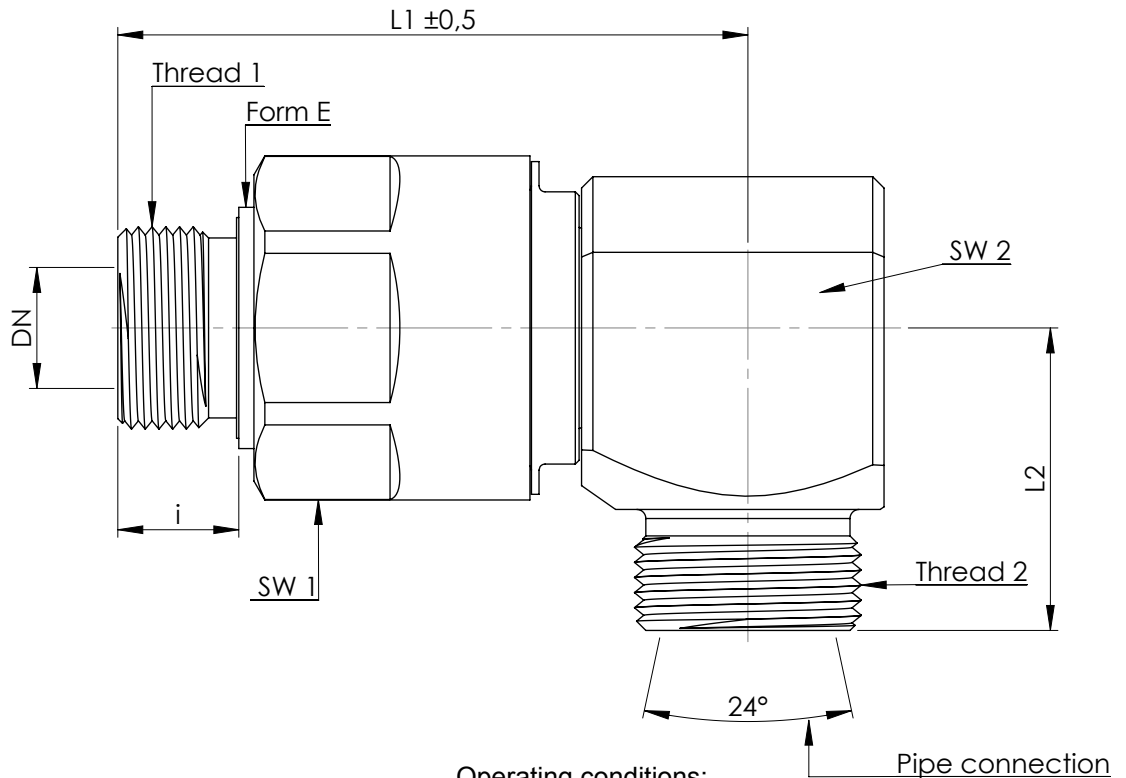
Medium: Hydraulic oil  
 (Dirt particles size up to max. 25µ)  
 Working pressure: min. 10bar up to max. 350bar  
 Temperature: from -30°C to +95°C  
 Suitable for rotary and oscillating movements to a  
 sliding speed maximum 0,025m/sec., (but not constant)  
 (Rotary speed is dependent on the shaft diameter)

	L1	L2	DN	i	SW 1	SW 2	Thread 1	Thread 2	Pipe con.	max. pressure
GK 1750/00N	62,0	29,0	10	16	30	22	M27 x 2,0	M22 x 1,5	15L	350 bar
* GK 1763/00N	60,5	29,0	10	12	30	22	M18 x 1,5	M18 x 1,5	12L	350 bar
* GK 1764/00N	60,5	29,0	10	12	30	22	M18 x 1,5	M22 x 1,5	15L	350 bar

\* Outer part of round material with milled hexagon

Issue: 07/2014  
 Technical changes are reserved to us.

### Ball bearing swivel N - Series



Outer part and adapter steel surface Zn - Ni  
 Axle steel hardened and ground  
 Hardened steel threaded bush  
 Thrust ball bearings for low torque  
 Seal:  
 - dynamic O.Ring NBR + Teflon support ring  
 O.Ring against external influences

**Operating conditions:**

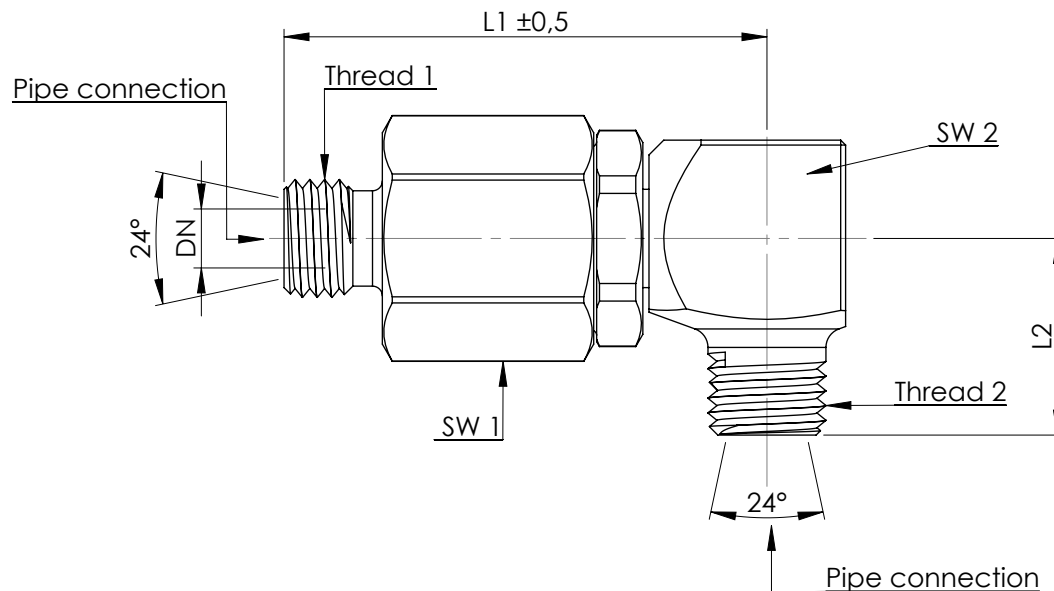
Medium: Hydraulic oil  
 (Dirt particles size up to max. 25 $\mu$ )  
 Working pressure: min. 10bar up to max. 350bar  
 Temperature: from -30°C to +95°C  
 Suitable for rotary and oscillating movements to a  
 sliding speed maximum 0,025m/sec., (but not constant)  
 (Rotary speed is dependent on the shaft diameter)

	L1	L2	DN	i	SW 1	SW 2	Thread 1	Thread 2	Pipe con.	max. pressure
* GK 1775/00N	83,0	39,5	16	16	41	40	M27 x 2,0	M30 x 2,0	20S	350bar
* GK 1776/00N	83,0	42,0	20	18	41	40	M33 x 2,0	M36 x 2,0	25S	350bar

\* Outer part of round material with milled hexagon

Issue: 07/2014  
 Technical changes are reserved to us.

## Ball bearing swivel N - Series



Outer part and adapter steel surface Zn - Ni  
Axle steel hardened and ground  
Hardened steel threaded bush  
Thrust ball bearings for low torque  
Seal:  
- dynamic O.Ring NBR + Teflon support ring  
O.Ring against external influences

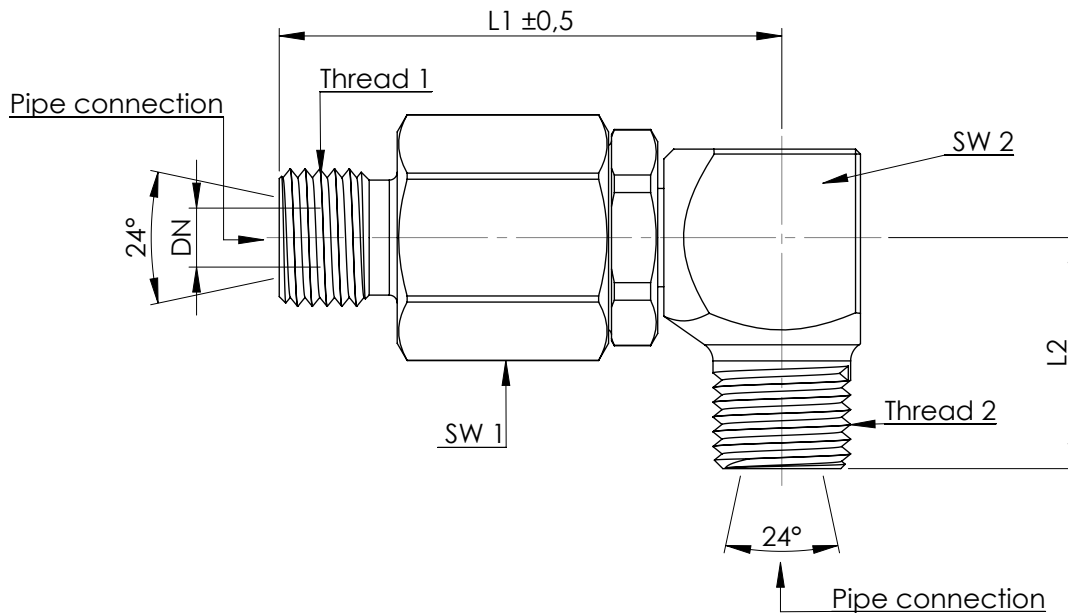
### Operating conditions:

Medium: Hydraulic oil  
(Dirt particles size up to max. 25 $\mu$ )  
Working pressure: min. 10bar up to 350bar  
Temperature: from -30°C to +95°C  
Suitable for rotary and oscillating movements to a sliding speed maximum 0,025m/sec., (but not constant)  
(Rotary speed is dependent on the shaft diameter)

	L1	L2	DN	SW 1	SW 2	Thread 1	Thread 2	Pipe con.	max. pressure
GK 1960/00N	49,5	20,0	04	22	20	M12 x 1,5	M12 x 1,5	6L	350 bar
GK 1961/00N	49,5	22,5	06	22	20	M14 x 1,5	M14 x 1,5	8L	350 bar
GK 1962/00N	62,0	29,0	08	30	22	M16 x 1,5	M16 x 1,5	10L	350bar
GK 1963/00N	63,0	29,0	08	30	22	M18 x 1,5	M18 x 1,5	12L	350bar
GK 1964/00N	62,0	29,0	10	30	22	M22 x 1,5	M22 x 1,5	15L	350bar
* GK 1965/00N	77,5	36,0	15	41	40	M26 x 1,5	M26 x 1,5	18L	350bar
* GK 1966/00N	82,5	38,0	19	41	40	M30 x 2,0	M30 x 2,0	22L	350bar
* GK 1967/00N	79,5	38,0	19	41	40	M36 x 2,0	M36 x 2,0	28L	250bar
GK 1968/00N	105,0	45,0	30	60	60	M45 x 2,0	M45 x 2,0	35L	250bar
GK 1969/00N	100,5	45,0	32	60	60	M52 x 2,0	M52 x 2,0	42L	250bar

Issue: 07/2014  
Technical changes are reserved to us.

### Ball bearing swivel N - Series



Outer part and adapter steel surface Zn - Ni  
 Axle steel hardened and ground  
 Hardened steel threaded bush  
 Thrust ball bearings for low torque  
 Seal:  
 - dynamic O.Ring NBR + Teflon support ring  
 O.Ring against external influences

**Operating conditions:**

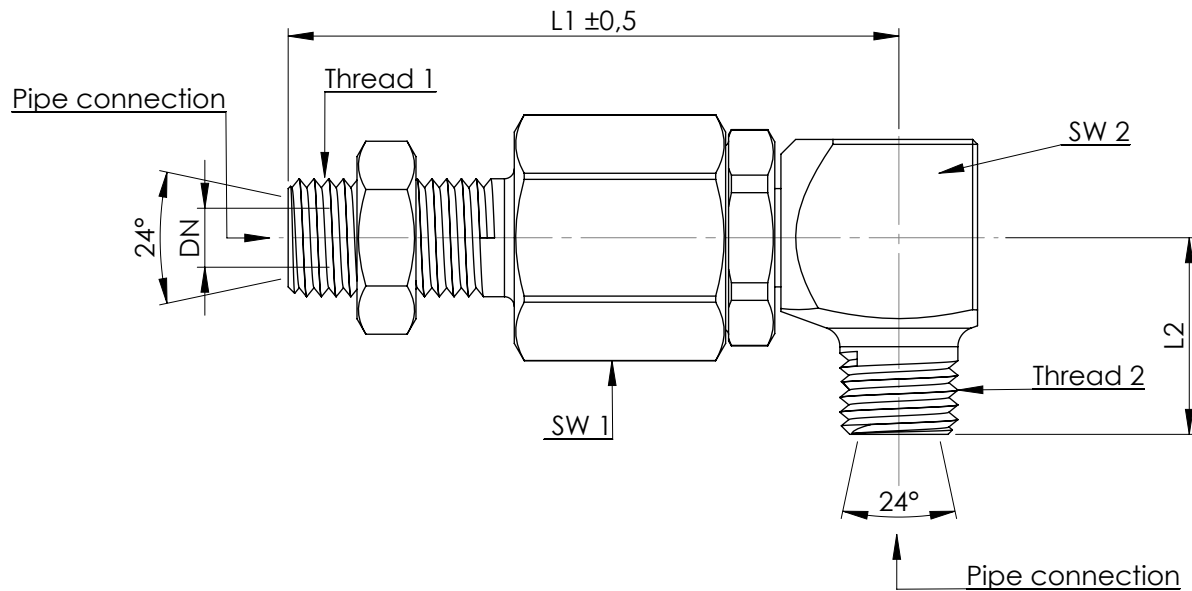
Medium: Hydraulic oil  
 (Dirt particles size up to max. 25µ)  
 Working pressure: min. 10bar up to max. 350bar  
 Temperature: from -30°C to +95°C  
 Suitable for rotary and oscillating movements to a sliding speed maximum 0,025m/sec., (but not constant) (Rotary speed is dependent on the shaft diameter)

	L1	L2	DN	SW 1	SW 2	Thread 1	Thread 2	Pipe con.	max. pressure
GK 1970/00N	51,0	23,5	03	22	20	M14 x 1,5	M14 x 1,5	6S	350 bar
GK 1971/00N	51,0	23,5	04	22	20	M16 x 1,5	M16 x 1,5	8S	350 bar
GK 1973/00N	63,0	29,0	7,5	30	22	M20 x 1,5	M20 x 1,5	12S	350bar
GK 1974/00N	63,0	33,0	10	30	30	M24 x 1,5	M24 x 1,5	16S	350bar
* GK 1975/00N	83,0	39,5	16	41	40	M30 x 2,0	M30 x 2,0	20S	350bar
* GK 1976/00N	83,0	42,0	18	41	40	M36 x 2,0	M36 x 2,0	25S	350bar
* GK 1977/00N	102,5	49,0	25	60	60	M42 x 2,0	M42 x 2,0	30S	250bar
* GK 1978/00N	102,5	57,0	32	60	60	M52 x 2,0	M52 x 2,0	38S	250bar

\* Outer part of round material with milled hexagon

Issue: 07/2014  
 Technical changes are reserved to us.

## Ball bearing swivel N - Series



Outer part and adapter steel surface Zn - Ni  
Axle steel hardened and ground  
Hardened steel threaded bush  
Thrust ball bearings for low torque  
Seal:  
- dynamic O.Ring NBR + Teflon support ring  
O.Ring against external influences

### Operating conditions:

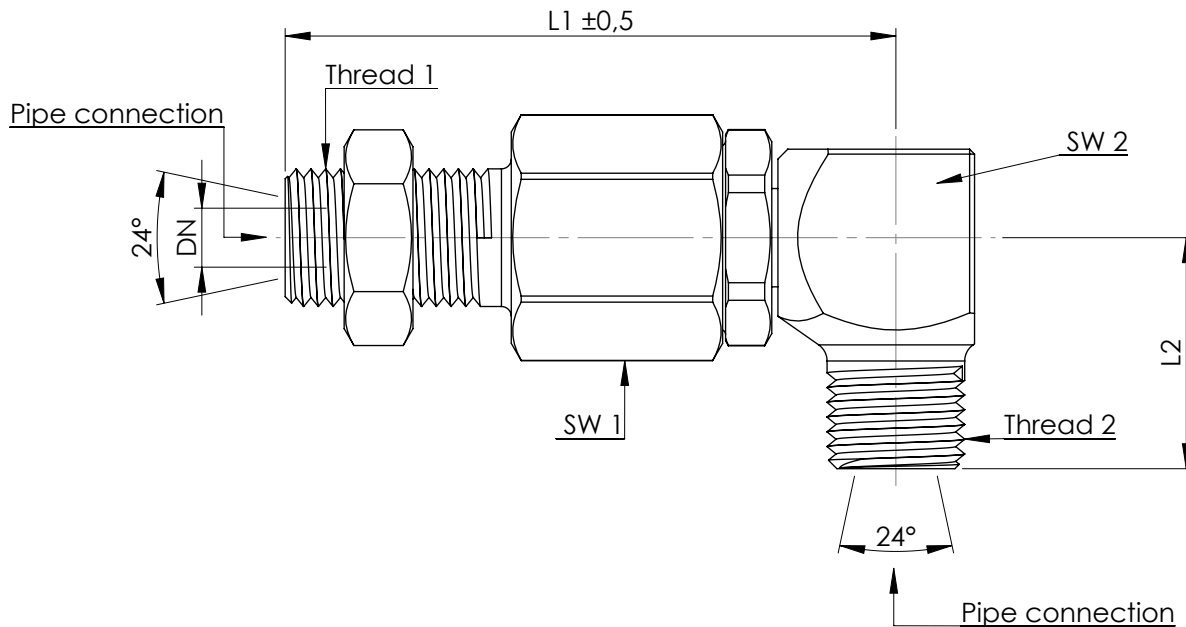
Medium: Hydraulic oil  
(Dirt particles size up to max. 25 $\mu$ )  
Working pressure: min. 10bar up to max. 350bar  
Temperature: from -30°C to +95°C  
Suitable for rotary and oscillating movements to a sliding speed maximum 0,025m/sec., (but not constant)  
(Rotary speed is dependent on the shaft diameter)

	L1	L2	DN	SW 1	SW 2	Thread 1	Thread 2	Pipe con.	max. pressure
GK 1860/00N	62,0	23,5	04	22	20	M12 x 1,5	M12 x 1,5	6L	350 bar
GK 1861/00N	62,0	23,5	06	22	20	M14 x 1,5	M14 x 1,5	8L	350 bar
GK 1862/00N	74,0	29,0	7,5	30	22	M16 x 1,5	M16 x 1,5	10L	350bar
GK 1863/00N	74,0	29,0	7,5	30	22	M18 x 1,5	M18 x 1,5	12L	350bar

Issue: 07/2014  
Technical changes are reserved to us.



## Ball bearing swivel N - Series



Outer part and adapter steel surface Zn - Ni  
Axle steel hardened and ground  
Hardened steel threaded bush  
Thrust ball bearings for low torque  
Seal:  
- dynamic O.Ring NBR + Teflon support ring  
O.Ring against external influences

### Operating conditions:

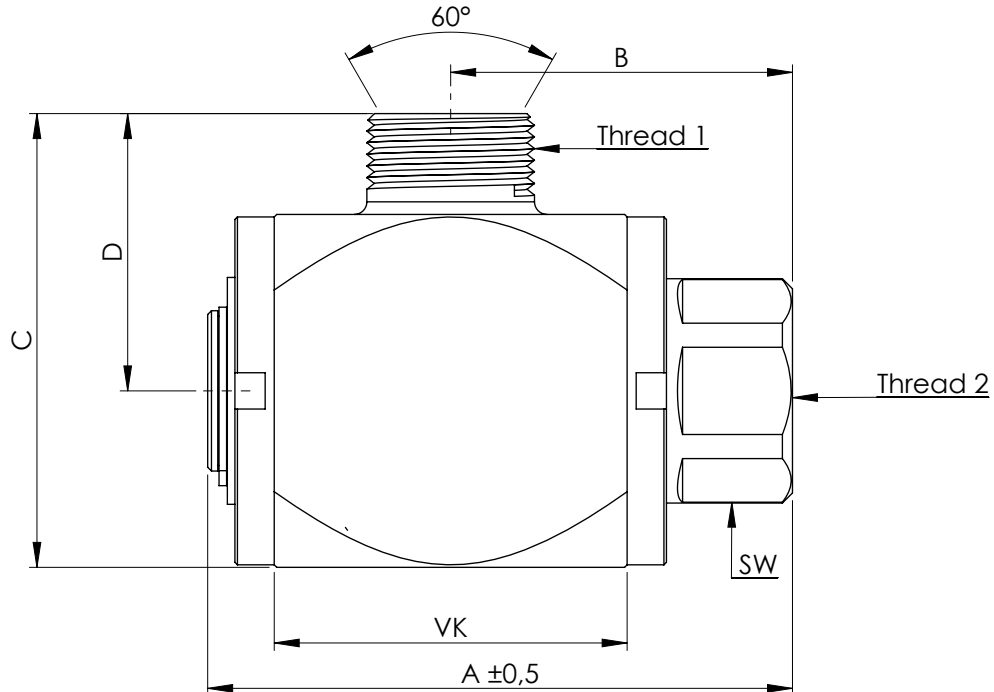
Medium: Hydraulic oil  
(Dirt particles size up to max. 25µ)  
Working pressure: min. 10bar up to max. 350bar  
Temperature: from -30°C to +95°C  
Suitable for rotary and oscillating movements to a sliding speed maximum 0,025m/sec., (but not constant)  
(Rotary speed is dependent on the shaft diameter)

	L1	L2	DN	SW 1	SW 2	Thread 1	Thread 2	Pipe con.	max. pressure
GK 1870/00N	62,5	23,5	03	22	20	M14 x 1,5	M14 x 1,5	6S	350 bar
GK 1871/00N	62,5	23,5	06	22	20	M16 x 1,5	M16 x 1,5	8S	350 bar
GK 1873/00N	74,0	29,0	7,5	30	22	M20 x 1,5	M20 x 1,2	12S	350bar
GK 1874/00N	75,0	33,0	11,5	30	30	M24 x 1,5	M24 x 1,5	16S	350bar
* GK 1875/00N	106,0	39,5	16	41	40	M30 x 2,0	M30 x 2,0	20S	350bar
* GK 1876/00N	107,0	42,0	18	41	36	M36 x 2,0	M36 x 2,0	25S	350bar
* GK 1877/00N	127,0	49,0	25	60	60	M42 x 2,0	M42 x 2,0	30S	250bar
* GK 1878/00N	127,5	57,0	32	60	60	M52 x 2,0	M52 x 2,0	38S	250bar

\* Outer part of round material with milled hexagon

Issue: 07/2014  
Technical changes are reserved to us.

### Angle swivel joint CNL



block & threaded socket steel surface. Zn - Ni  
 Axle steel surface Zn - Ni  
 Threaded bush with IGUS - plain GSM  
 Seal:  
 - dynamic Nutring NBR  
 - static O.Ring NBR & Teflon support ring  
 Shaft seal against external influences

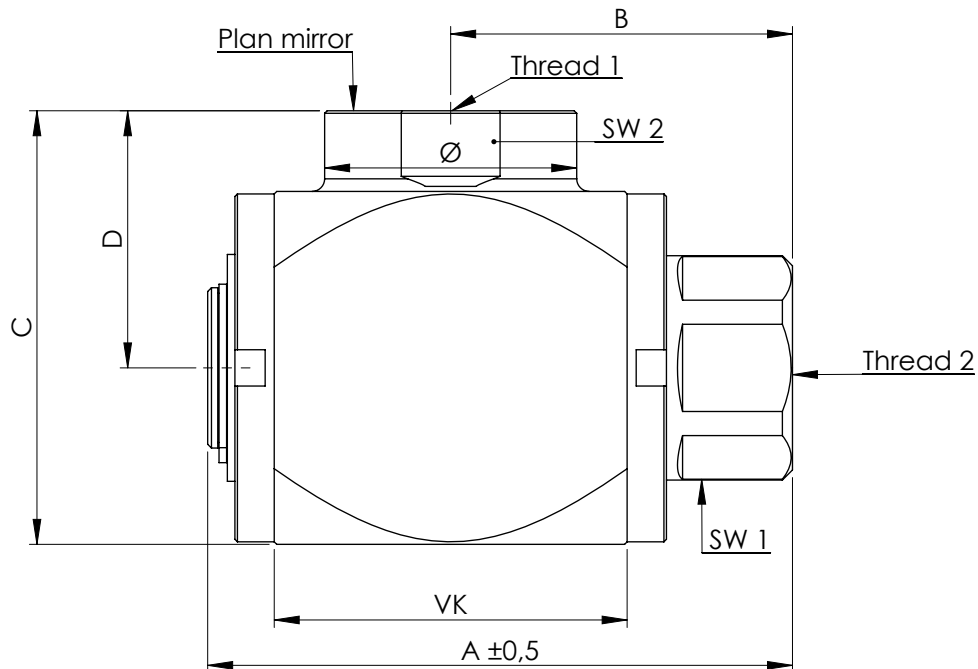
Operating conditions:

Medium: Hydraulic oil  
 (Dirt particles size up to max. 25µ)  
 Working pressure: min. 10bar up to max. 160bar  
 Temperature: from -30°C to +95°C  
 Suitable for rotary and oscillating movements to a  
 sliding speed maximum 0,05m/sec., (but not constant)  
 (Rotary speed is dependent on the shaft diameter)

	A	B	C	D	VK	SW	Thread 1	Thread 2
711 5200/00	70,0	43,0	56,0	36,0	40	24	AG 1/4"	IG 1/4"
711 5205/00	70,0	43,0	56,0	36,0	40	24	AG 3/8"	IG 3/8"
711 5210/00	70,0	43,0	56,0	36,0	40	27	AG 1/2"	IG 1/2"
711 5215/00	91,5	57,0	63,0	40,5	45	32	AG 5/8"	IG 5/8"
711 5220/00	91,5	57,0	63,0	40,5	45	32	AG 3/4"	IG 3/4"
711 5230/00	116,0	68,0	90,0	55,0	70	41	AG 1"	IG 1"
711 5240/00	132,0	78,0	102,0	62,0	80	55	AG 1 1/4"	IG 1 1/4"
711 5250/00	132,0	78,0	104,0	64,0	80	55	AG 1 1/2"	IG 1 1/2"

Issue: 07/2014  
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### Angle swivel joint CNL



block & threaded socket steel surface. Zn - Ni  
 Axle steel surface Zn - Ni  
 Threaded bush with IGUS - plain GSM  
 Seal:  
 - dynamic Nutring NBR  
 - static O.Ring NBR & Teflon support ring  
 Shaft seal against external influences

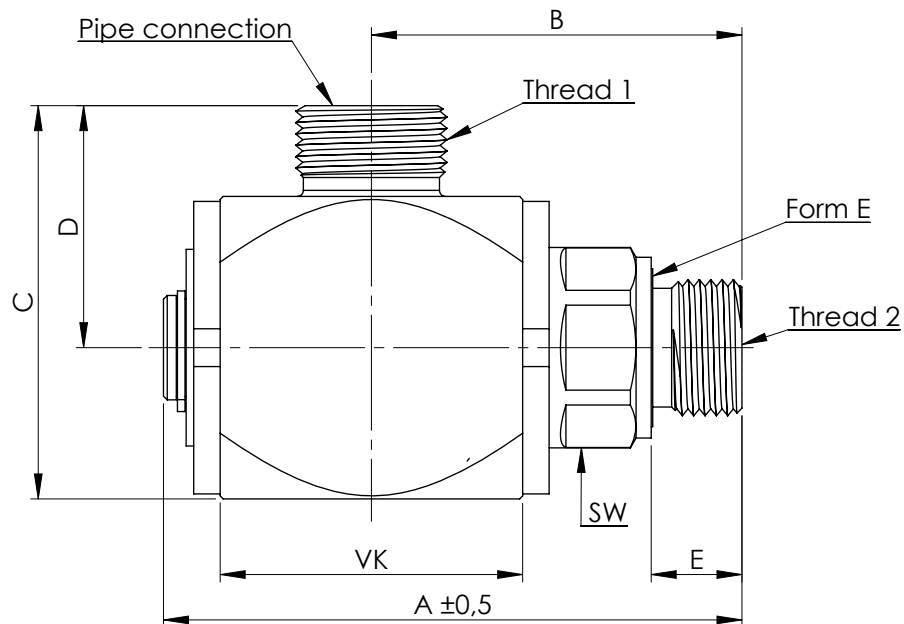
**Operating conditions:**

Medium: Hydraulic oil  
 (Dirt particles size up to max. 25µ)  
 Working pressure: min. 10bar up to max. 160bar  
 Temperature: from -30°C to +95°C  
 Suitable for rotary and oscillating movements to a sliding speed maximum 0,05m/sec., (but not constant)  
 (Rotary speed is dependent on the shaft diameter)

	A	B	C	D	Ø	VK	SW 1	SW 2	Thread 1	Thread 2
711 5400/00	70,0	43,0	53,0	33,0	30,0	40	24	27	IG 1/4"	IG 1/4"
711 5405/00	70,0	43,0	53,0	33,0	30,0	40	24	27	IG 3/8"	IG 3/8"
711 5410/00	70,0	43,0	53,0	33,0	35,0	40	27	30	IG 1/2"	IG 1/2"
711 5415/00	91,5	57,0	63,0	40,5	40,0	45	32	36	IG 5/8"	IG 5/8"
711 5420/00	91,5	57,0	63,0	40,5	40,0	45	32	36	IG 3/4"	IG 3/4"
711 5430/00	116,0	68,0	86,0	51,0	50,0	70	41	46	IG 1"	IG 1"
711 5440/00	132,0	78,0	104,0	64,0	62,0	80	55	55	IG 1 1/4"	IG 1 1/4"
711 5450/00	132,0	78,0	104,0	64,0	65,0	80	55	60	IG 1 1/2"	IG 1 1/2"

Issue: 07/2014  
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### Angle swivel joint CNL



block & threaded socket steel surface. Zn - Ni  
 Axle steel surface Zn - Ni  
 Threaded bush with IGUS - plain GSM  
 Seal:  
 - dynamic Nutring NBR  
 - static O.Ring NBR & Teflon support ring  
 Shaft seal against external influences

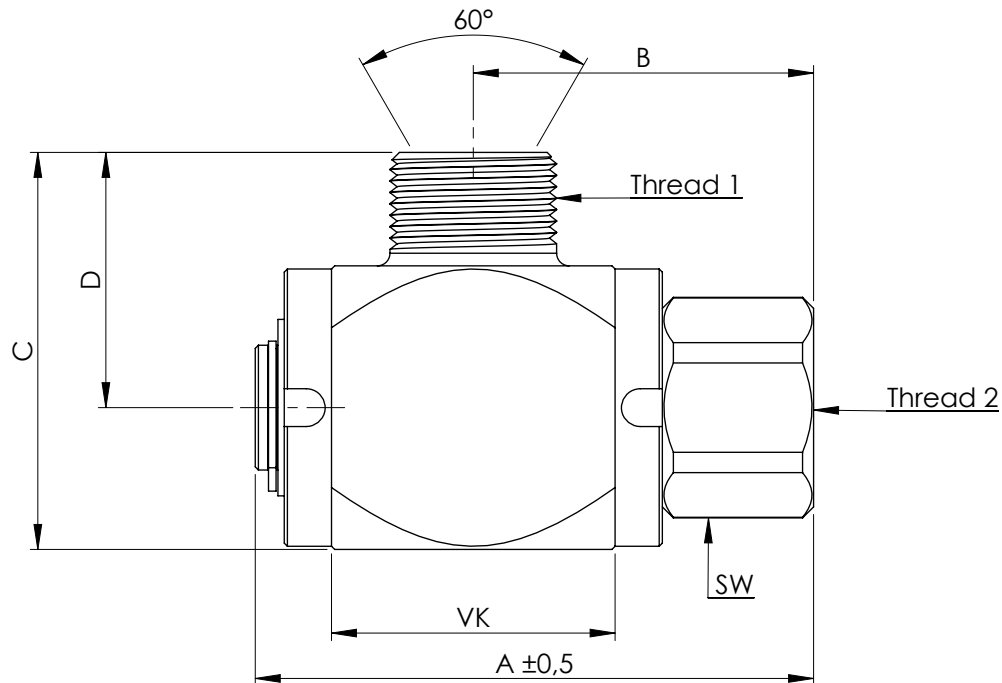
Operating conditions:

Medium: Hydraulic oil  
 (Dirt particles size up to max. 25µ)  
 Working pressure: min. 10bar up to max. 160bar  
 Temperature: from -30°C to +95°C  
 Suitable for rotary and oscillating movements to a sliding speed maximum 0,05m/sec., (but not constant)  
 (Rotary speed is dependent on the shaft diameter)

	A	B	C	D	VK	SW	Thread 1	Thread 2
GK 5651/00	76,5	49,0	52,0	32,0	40	24	M18 x 1,5	M18 x 1,5
GK 5653/00	76,5	49,0	52,0	32,0	40	24	M22 x 1,5	M18 x 1,5
GK 5654/00	76,5	49,0	52,0	32,0	40	27	M22 x 1,5	M22 x 1,5
GK 5655/00	76,5	49,0	54,0	34,0	40	27	M24 x 1,5	M22 x 1,5
GK 5656/00	76,5	49,0	52,0	32,0	40	27	M26 x 1,5	M22 x 1,5
GK 5652/00	76,5	49,0	52,0	32,0	40	24	M20 x 1,5	M18 x 1,5
GK 5657/00	97,5	63,0	61,0	38,5	45	32	M30 x 2,0	M27 x 2,0

Issue: 07/2014  
 Technical changes are reserved to us.

### Angle swivel joint with rotating union nut



block & threaded socket steel surface. Zn - Ni  
 Axle steel surface Zn - Ni  
 Threaded bush with IGUS - plain GSM  
 Seal:  
 - dynamic Nutring NBR  
 - static O.Ring NBR & Teflon support ring  
 Shaft seal against external influences

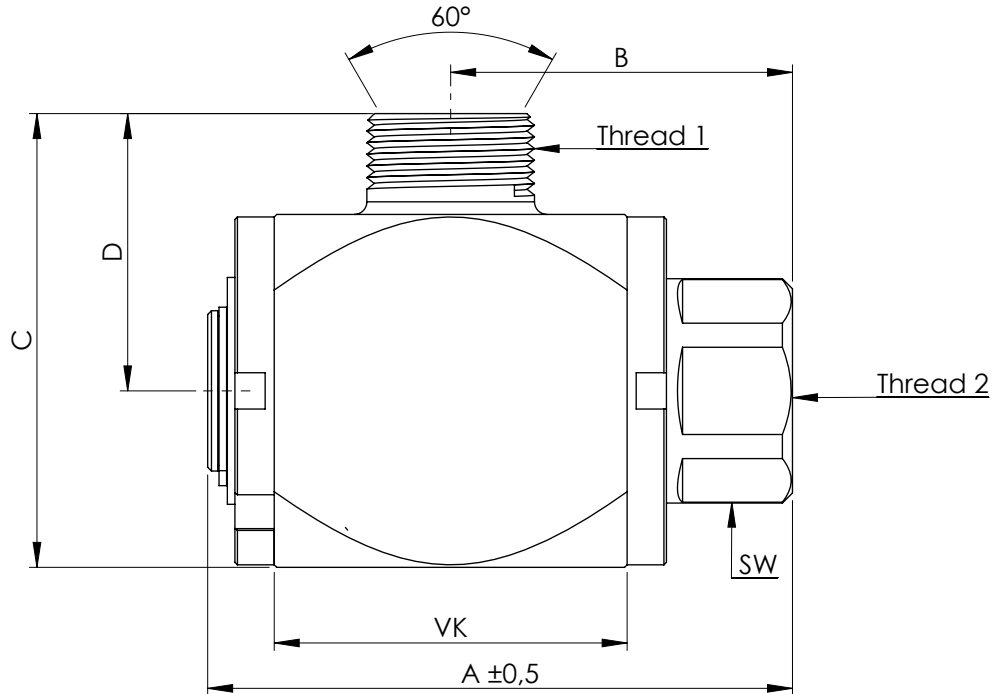
Operating conditions:

Medium: Hydraulic oil  
 (Dirt particles size up to max. 25 $\mu$ )  
 Working pressure: min. 10bar up to max.160bar  
 Temperature: from -30°C to +95°C  
 Suitable for rotary and oscillating movements to a sliding speed maximum 0,05m/sec., (but not constant)  
 (Rotary speed is dependent on the shaft diameter)

	A	B	C	D	VK	SW	Thread 1	Thread 2
711 5710/00	72,0	44,5	56,0	36,0	40	27	AG 1/2"	IG 1/2"
711 5720/00	88,5	54,0	63,0	40,5	45	32	AG 3/4"	IG 3/4"

Issue: 07/2014  
 Technical changes are reserved to us.

### Angle swivel joint CNL



block & threaded socket steel surface. Zn - Ni  
 Axle steel surface chem. Nickel  
 Threaded bush with IGUS - plain JSM  
 Seal:  
 - dynamic WDI PTFE with O.Ring NBR  
 - static O.Ring NBR & Teflon support ring  
 Shaft seal against external influences

**Operating conditions:**

Medium: Hydraulic oil & water

(Dirt particles size up to max. 25µ)

Working pressure: min. 10bar up to max. 400bar

Temperature: Hydraulic oil from -30°C to +95°C

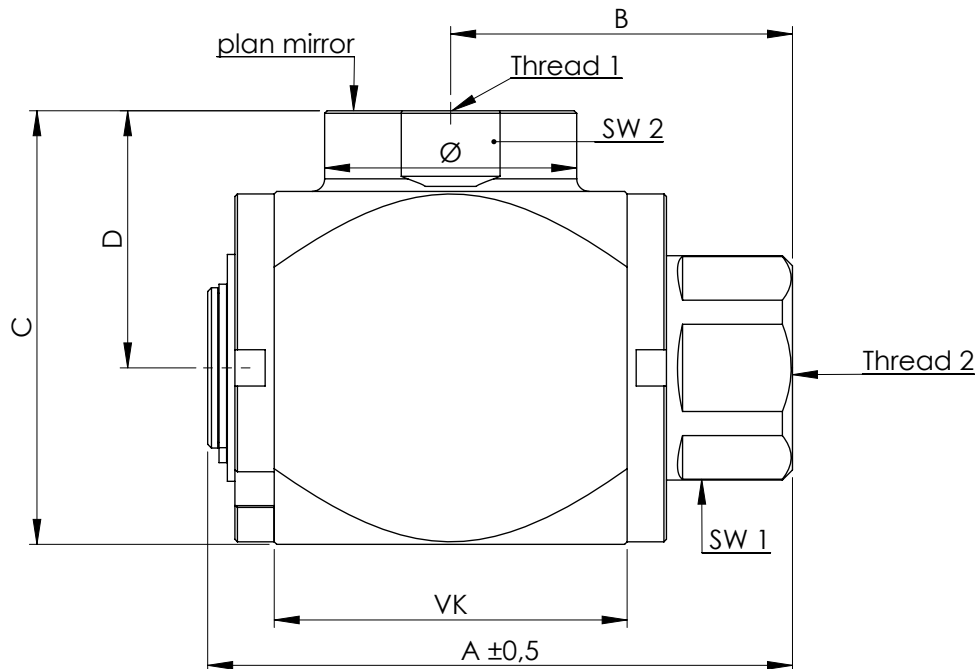
Water from 0°C to +80°C

Suitable for rotary and oscillating movements to a sliding speed maximum 0,05m/sec., (but not constant) (Rotary speed is dependent on the shaft diameter)

	A	B	C	D	VK	SW	Thread 1	Thread 2
711 5200/20	70,0	43,0	56,0	36,0	40	24	AG 1/4"	IG 1/4"
711 5205/20	70,0	43,0	56,0	36,0	40	24	AG 3/8"	IG 3/8"
711 5210/20	70,0	43,0	56,0	36,0	40	27	AG 1/2"	IG 1/2"
711 5215/20	91,5	57,0	63,0	40,5	45	32	AG 5/8"	IG 5/8"
711 5220/20	91,5	57,0	63,0	40,5	45	32	AG 3/4"	IG 3/4"
711 5230/20	116,0	68,0	90,0	55,0	70	41	AG 1"	IG 1"
711 5240/20	132,0	78,0	102,0	62,0	80	55	AG 1 1/4"	IG 1 1/4"
711 5250/20	132,0	78,0	104,0	64,0	80	55	AG 1 1/2"	IG 1 1/2"

Issue: 07/2014  
 Technical changes are reserved to us.

### Angle swivel joint CNL



block & threaded socket steel surface. Zn - Ni  
 Axle steel surface chem. Nickel  
 Threaded bush with IGUS - plain JSM  
 Seal:  
 - dynamic WDI PTFE with O.Ring NBR  
 - static O.Ring NBR & Teflon support ring  
 Shaft seal against external influences

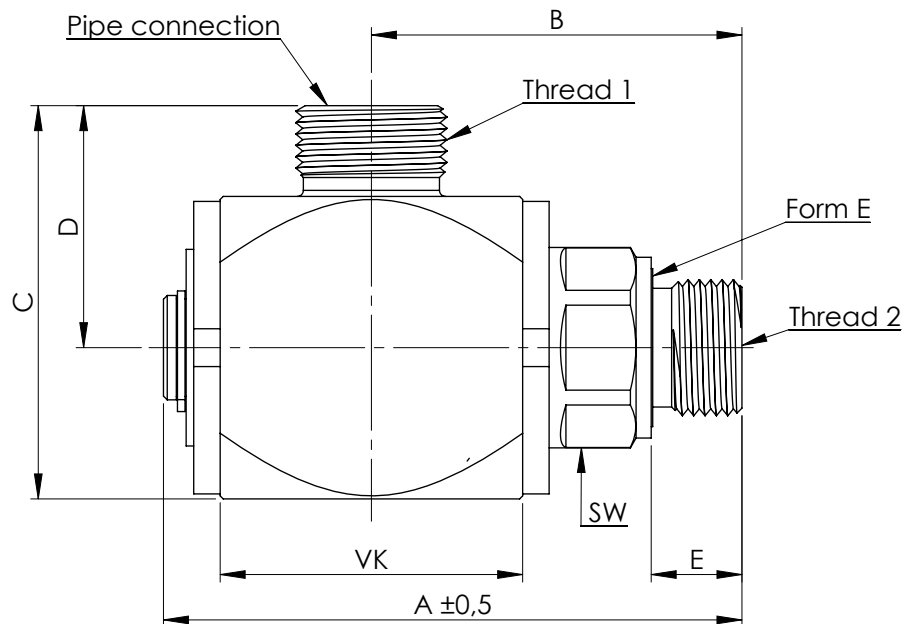
**Operating conditions:**

Medium: Hydraulic oil & water  
 (Dirt particles size up to max. 25µ)  
 Working pressure: min. 10bar up to max. 400bar  
 Temperature: Hydraulic oil from -30°C to +95°C  
 Water from 0°C to +80°C  
 Suitable for rotary and oscillating movements to a sliding speed maximum 0,05m/sec., (but not constant)  
 (Rotary speed is dependent on the shaft diameter)

	A	B	C	D	Ø	VK	SW 1	SW 2	Thread 1	Thread 2
711 5400/20	70,0	43,0	53,0	33,0	30,0	40	24	27	IG 1/4"	IG 1/4"
711 5405/20	70,0	43,0	53,0	33,0	30,0	40	24	27	IG 3/8"	IG 3/8"
711 5410/20	70,0	43,0	53,0	33,0	35,0	40	27	30	IG 1/2"	IG 1/2"
711 5415/20	91,5	57,0	63,0	40,5	40,0	45	32	36	IG 5/8"	IG 5/8"
711 5420/20	91,5	57,0	63,0	40,5	40,0	45	32	36	IG 3/4"	IG 3/4"
711 5430/20	116,0	68,0	86,0	51,0	50,0	70	41	46	IG 1"	IG 1"
711 5440/20	132,0	78,0	104,0	64,0	62,0	80	55	55	IG 1 1/4"	IG 1 1/4"
711 5450/20	132,0	78,0	104,0	64,0	65,0	80	55	60	IG 1 1/2"	IG 1 1/2"

Issue: 07/2014  
 Technical changes are reserved to us.

### Angle swivel joint CNL



block & threaded socket steel surface. Zn - Ni  
 Axle steel surface chem. Nickel  
 Threaded bush with IGUS - plain JSM  
 Seal:  
 - dynamic WDI PTFE with O.Ring NBR  
 - static O.Ring NBR & Teflon support ring  
 Shaft seal against external influences

**Operating conditions:**

Medium: Hydraulic oil & water

(Dirt particles size up to max. 25µ)

Working pressure: min. 10bar up to max. 400bar

Temperature: Hydraulic oil from -30°C to +95°C

Water from 0°C to +80°C

Suitable for rotary and oscillating movements to a sliding speed maximum 0,05m/sec., (but not constant) (Rotary speed is dependent on the shaft diameter)

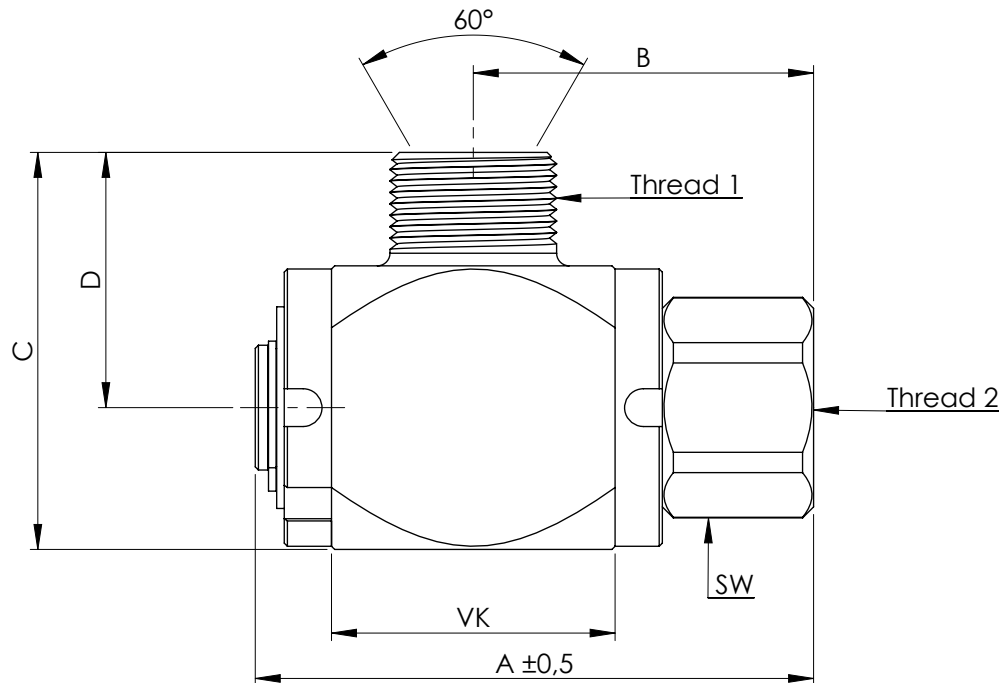
	A	B	C	D	VK	SW	Thread 1	Thread 2
GK 5651/20	76,5	49,0	52,0	32,0	40	24	M18 x 1,5	M18 x 1,5
GK 5652/20	76,5	49,0	52,0	32,0	40	24	M20 x 1,5	M18 x 1,5
GK 5653/20	76,5	49,0	52,0	32,0	40	24	M22 x 1,5	M18 x 1,5
GK 5654/20	76,5	49,0	52,0	32,0	40	27	M22 x 1,5	M22 x 1,5
GK 5655/20	76,5	49,0	54,0	34,0	40	27	M24 x 1,5	M22 x 1,5
GK 5656/20	76,5	49,0	52,0	32,0	40	27	M26 x 1,5	M22 x 1,5
GK 5657/20	97,5	63,0	61,0	38,5	45	32	M30 x 2,0	M27 x 2,0

Issue: 07/2014

Technical changes are reserved to us.



### Angle swivel joint with rotating union nut



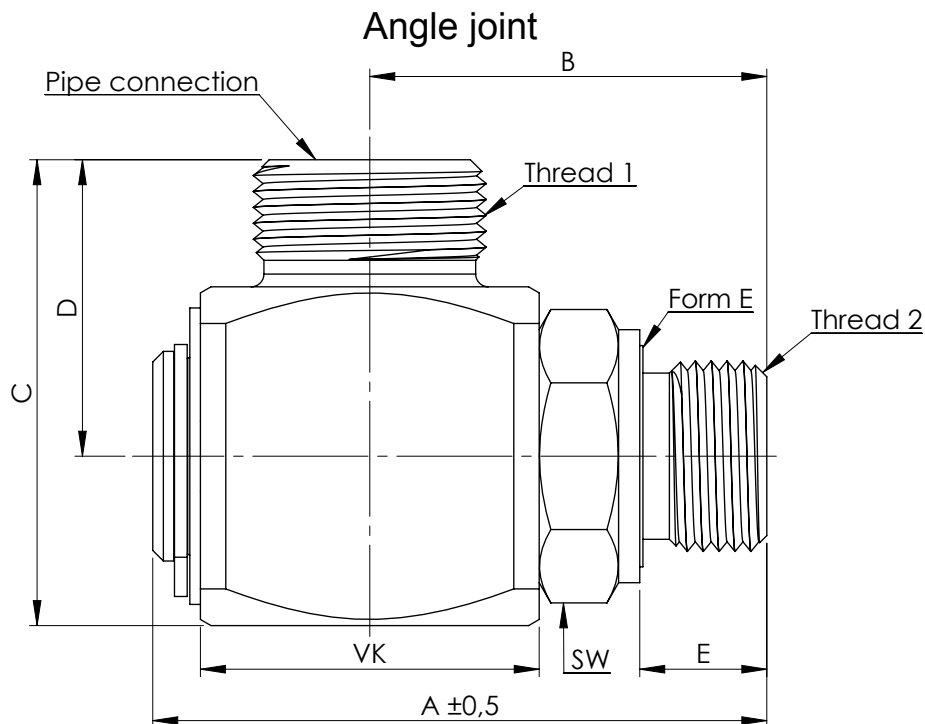
block & threaded socket steel surface. Zn - Ni  
 Axle steel surface chem. Ni.  
 Threaded bush with IGUS - plain GSM  
 Seal:  
 - dynamic WDI PTFE with O.Ring NBR  
 - static O.Ring NBR & Teflon support ring  
 Shaft seal against external influences

**Operating conditions:**

Medium: Hydraulic oil & water  
 (Dirt particles size up to max. 25µ)  
 Working pressure: min. 10bar up to max. 400bar  
 Temperature: Hydraulic oil from -30°C to +95°C  
 Water from 0°C to +80°C  
 Suitable for rotary and oscillating movements to a  
 sliding speed maximum 0,05m/sec., (but not constant)  
 (Rotary speed is dependent on the shaft diameter)

	A	B	C	D	VK	SW	Thread 1	Thread 2
711 5710/20	72,0	44,5	56,0	36,0	40	27	AG 1/2"	IG 1/2"
711 5720/20	88,5	54,0	63,0	40,5	45	32	AG 3/4"	IG 3/4"

Issue: 07/2014  
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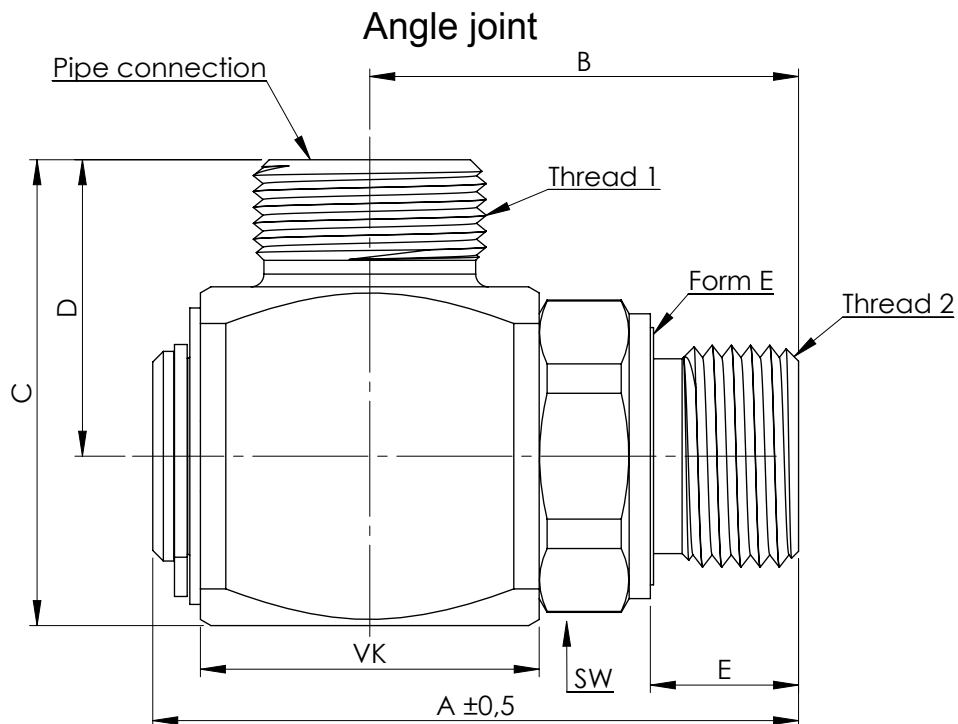
block steel surface. Zn - Ni  
Axle steel surface Zn - Ni and polished  
Seal:  
- dynamic O.Ring NBR & Teflon support ring

Operating conditions:  
Medium: Hydraulic oil  
(Dirt particles size up to max. 25µ)  
Working pressure: min. 10bar up to max. 250bar  
Temperature: from -30°C to +95°C  
Suitable for rotary and oscillating movements to a  
sliding speed maximum 0,01m/sec., (but not constant)  
(Rotary speed is dependent on the shaft diameter)

	A	B	C	D	E	VK	SW	Thread 1	pipe connection	Thread 2
GK 1229/00	58,0	37,5	44,0	28,0	12,0	32	24	M18 x 1,5	12L	M18 x 1,5
*GK 1315/00*	58,0	37,5	44,0	28,0	12,0	32	24	M20 x 1,5	12S	M18 x 1,5
GK 1316/00	58,0	37,5	44,0	28,0	12,0	32	24	M20 x 1,5	12S	M18 x 1,5
GK 1224/00	58,0	37,5	44,0	28,0	12,0	32	24	M22 x 1,5	15L	M18 x 1,5
GK 1294/00	59,0	38,5	44,0	28,0	12,0	32	27	M22 x 1,5	15L	M22 x 1,5
GK 1355/00	59,0	38,5	46,0	30,0	12,0	32	27	M24 x 1,5	16S	M22 x 1,5
GK 1313/00	59,0	38,5	44,0	28,0	12,0	32	27	M26 x 1,5	18L	M22 x 1,5
GK 1346/00	73,0	48,0	52,0	32,0	14,0	40	32	M26 x 1,5	18L	M22 x 1,5
GK 1337/00	73,0	48,0	56,0	36,0	14,0	40	32	M30 x 2,0	20S	M22 x 1,5
GK 1339/00	75,0	50,0	56,0	36,0	16,0	40	32	M30 x 2,0	20S	M27 x 2,0

\*block with radius

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block steel surface. Zn - Ni  
Axle steel surface Zn - Ni and polished  
Seal:  
- dynamic O.Ring NBR & Teflon support ring

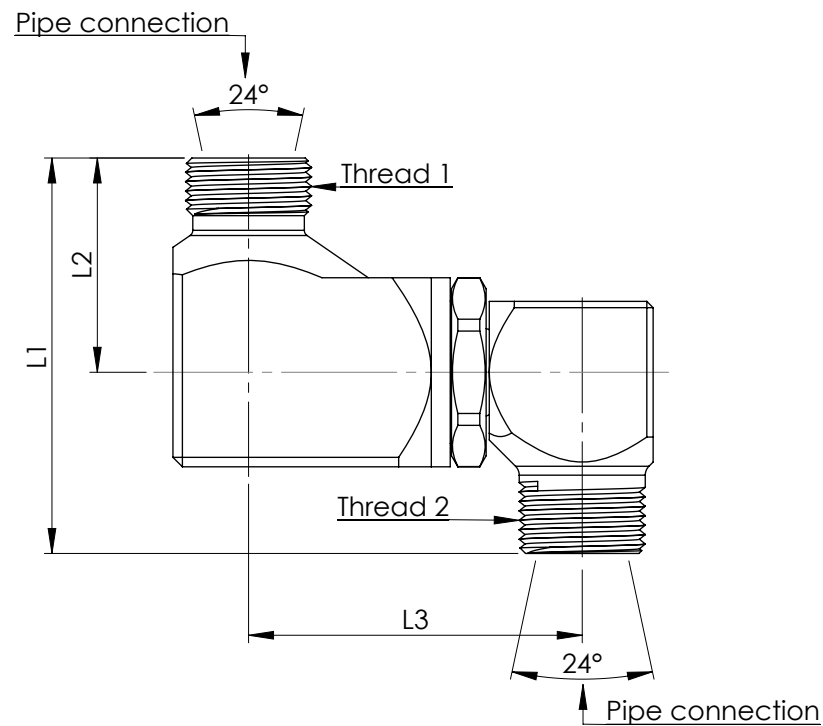
**Operating conditions:**  
Medium: Hydraulic oil  
(Dirt particles size up to max. 25µ)  
Working pressure: min. 10bar up to max. 250bar  
Temperature: from -30°C to +95°C  
Suitable for rotary and oscillating movements to a sliding speed maximum 0,01m/sec., (but not constant)  
(Rotary speed is dependent on the shaft diameter)

	A	B	C	D	E	VK	SW	Thead 1	pipe connection	Thread 2
GK 1334/00	61,0	40,5	44,0	28,0	14,0	32	24	M18 x 1,5	12L	AG 1/2"
GK 1318/00	58,0	37,5	44,0	28,0	12,0	32	24	M18 x 1,5	12L	AG 3/8"
*GK 1312/00*	61,0	40,5	44,0	28,0	14,0	32	27	M20 x 1,5	12S	AG 1/2"
GK 1319/00	58,0	37,5	44,0	28,0	12,0	32	24	M20 x 1,5	12S	AG 3/8"
GK 1333/00	58,0	37,5	44,0	28,0	12,0	32	24	M22 x 1,5	15L	AG 3/8"
GK 1295/00	61,0	40,5	44,0	28,0	14,0	32	27	M22 x 1,5	15L	AG 1/2"
GK 1353/00	58,0	37,5	46,0	30,0	12,0	32	24	M24 x 1,5	16S	AG 3/8"
GK 1354/00	61,0	40,5	46,0	30,0	14,0	32	27	M24 x 1,5	16S	AG 1/2"
GK 1340/00	61,0	40,5	44,0	28,0	14,0	32	24	M26 x 1,5	18L	AG 1/2"
GK 1350/00	72,0	47,0	56,0	36,0	16,0	40	32	M30 x 2,0	20S	AG 3/4"

\*block with radius

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## ball bearing double angle swivel N - Series



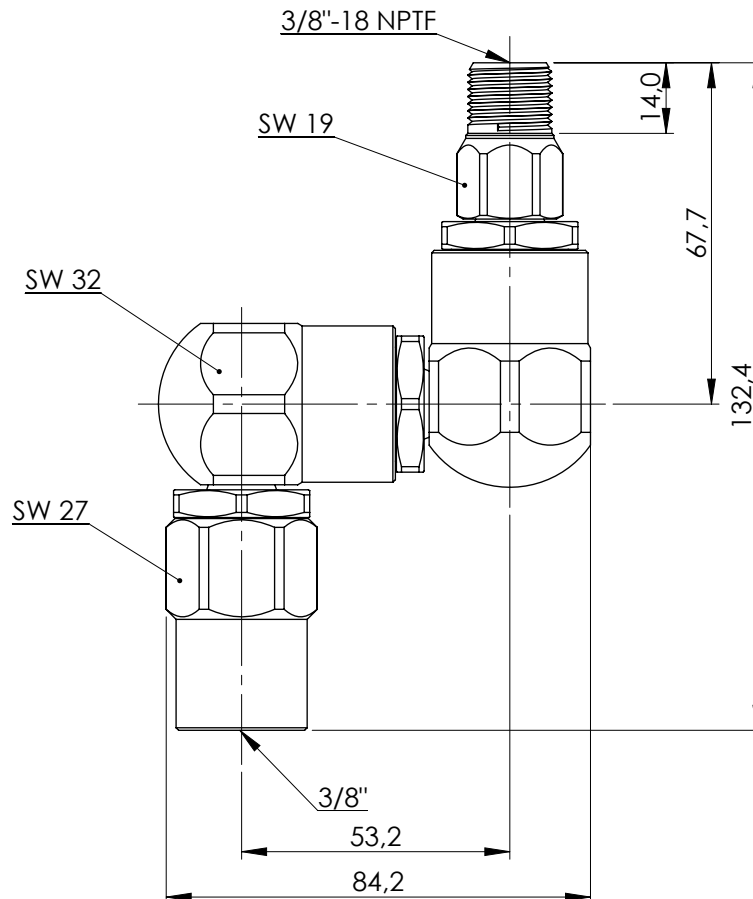
Steel parts surface Zn - Ni  
 Axle steel hardened and ground  
 Hardened steel threaded bush  
 Thrust ball bearings for low torque  
 Seal:  
 - dynamic O.Ring NBR + Teflon support ring  
 O.Ring against external influences

**Operating conditions:**  
 Medium: Hydraulic oil  
 (Dirt particles size up to max. 25µ)  
 Working pressure: min. 10bar up to max. 350bar  
 Temperature: from -30°C to +95°C  
 Suitable for rotary and oscillating movements to a sliding speed maximum 0,025m/sec., (but not constant)  
 (Rotary speed is dependent on the shaft diameter)

	L1	L2	L3	DN	SW 1	SW 2	Thread 1	Thread 2	pipe conn.	max. pressure
GK 1993/00N	63,0	34,0	53,0	7,5	30	22	M20 x 1,5	M20 x 1,5	12S	350bar
GK 1994/00N	67,0	34,0	53,0	12	30	30	M24 x 1,5	M24 x 1,5	16S	350bar
GK 1995/00N	87,5	47,5	76,0	16	45	40	M30 x 2,0	M30 x 2,0	20S	350bar
GK 1996/00N	94,5	52,5	76,0	19	45	40	M36 x 2,0	M36 x 2,0	25S	350bar
GK 1997/00N	114,5	65,5	92,5	25	65	60	M42 x 2,0	M42 x 2,0	30S	250bar
GK 1998/00N	122,5	65,5	92,5	32	65	60	M52 x 2,0	M52 x 2,0	38S	250bar

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 Technical changes are reserved to us.

## Ball bearing Z - Joint



### GK 3136/00 other sizes on request

Steel parts surface Zn - Ni  
 Axle steel hardened and ground  
 Hardened steel threaded bush  
 Thrust ball bearings for low torque  
 Seal:  
 - dynamic O.Ring NBR + Teflon support ring  
 O.Ring against external influences

Operating conditions:  
 Medium: Hydraulic oil  
 (Dirt particles size up to max. 25 $\mu$ )  
 Working pressure: min. 10bar up to max. 350bar  
 Temperature: from -30°C to +95°C  
 Suitable for rotary and oscillating movements to a  
 sliding speed maximum 0,025m/sec., (but not constant)  
 (Rotary speed is dependent on the shaft diameter)

Issue: 07/2014  
 Technical changes are reserved to us.