

Part number:

HYDROMA

HYDRAULICKÉ SYSTÉMY

**HIDROMA
SYSTEMS**

UKŁADY HYDRAULICZNE

HYDROMA

ГИДРАВЛИЧЕСКИЕ СИСТЕМЫ

1 Universal expansion joints with swivel flange

PK

NB 40 – NB 500



- ▶ **Type PK**
without vacuum support ring
- ▶ **Type PK/A**
with internal vacuum support ring

Universal expansion joint with one arch

- Design:** Hydrodynamic, single-arch rubber bellows with self sealing rubber bulges and swivel backing flanges with support collar
Optionally with vacuum support ring
- Nominal diameters:** NB 40 to NB 500, intermediate sizes possible
- Installation length:** Standard $L_4 = 130$ and $LE = 200$ mm
- Pressure:** Depending on the nominal diameter up to **15 bar**
Vacuum-proof up to **0.8 bar absolute**, with vacuum support ring up to **0.05 bar absolute** Design in accordance with Pressure Equipment Directive PED 97/23/EC
- Movement:** For axial, lateral and angular movements
(▶ page 4)

Application:

Cooling water systems, desalination plants, drinking water supply, plant construction, e. g. in pipelines, on pumps, as dismantling joints, on condensers and vessels



Rubber bellows

Rubber grades		Carrier
up to 110°C:	EPDM	Cooling water, hot water, seawater, acids, dilute chlorine compounds
up to 80°C:	CIIR, drinking water approved	Drinking water
up to 70°C:	NBR	Oils, petrol, solvents, compressed air
		Nylon fabric Polyester fabric Kevlar fabric Glass fibre fabric Steel mesh



Flanges

Design:	Single-part, swivel, round backing flanges with support collar, clearance holes and groove to accommodate the rubber bulges
Flange norms:	DIN, ANSI, AWWA, BS, JIS, special measurements
Materials:	Carbon steel: 1.0038 (S235JRG2) 1.0570 (S355J2G3) Stainless steel: 1.4301 (X5CrNi18-10) 1.4571 (X6CrNiMoTi17-12-2) Aluminium: AlMg3 Other materials on request
Coating:	Primed, hot-dip galvanised, special paint

Optional accessories

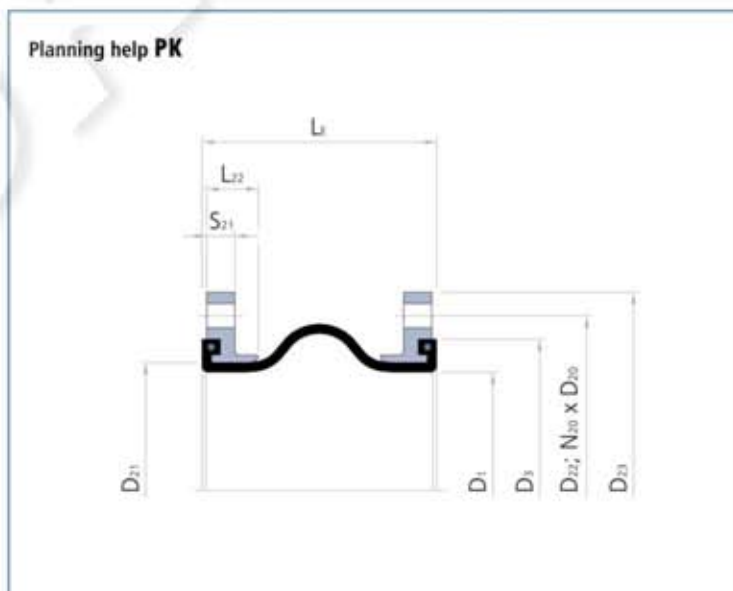
Protective hood:	UV protection cover Ground protective cover Fire protection cover
Flow liners:	Cylindrical flow liner Conical flow liner Telescoping flow liner

Support rings

TYPE		Vacuum support ring	Pressure	Movement
PK		Without	Depending on the nominal diameter up to 15 bar, for vacuum up to 0.8 bar absolute	▶ page 4
PK/A		Vacuum support ring spirals (1.4310) up to NB 500,	Depending on the nominal diameter up to 15 bar, for vacuum up to 0.05 bar absolute	▶ page 4

Materials

Stainless steel:	1.4301 (X5CrNi18-10) 1.4539 (X1NiCrMoCu25-20-5) 1.4571 (X6CrNiMoTi17-12-2)	Other materials on request
Carbon steel:	1.0570 (S355J2G3) rubber coated	





Installation length (L _E) at design pressure										
up to 15 bar L _E = 130 mm						up to 12 bar L _E = 200 mm				
Higher pressure on request										
NB	Movement				A	Movement				A
	mm	mm	±mm	±°	cm ²	mm	mm	±mm	±°	cm ²
40	30	30	15	10	19					
50	30	30	15	10	33					
65	30	30	20	15	58					
80	30	30	20	15	90					
100	30	30	20	15	130					
125	30	30	20	15	189					
150	30	30	20	20	243					
200	30	30	30	20	415					
250	30	30	30	20	562					
300						35	35	30	25	828
350						35	35	30	25	910
400						40	40	35	25	1020
500						40	40	35	25	1703



Installation length (L _E) at design pressure										
up to 15 bar L _E = 130 mm						up to 12 bar L _E = 200 mm				
Higher pressure on request										
NB	Movement				A	Movement				A
	mm	mm	±mm	±°	cm ²	mm	mm	±mm	±°	cm ²
40	30	20	5	10	19					
50	30	20	5	10	33					
65	30	20	10	15	58					
80	30	20	10	15	90					
100	30	20	10	15	130					
125	30	20	10	15	189					
150	30	20	10	20	243					
200	30	20	20	20	415					
250	30	20	20	20	562					
300						35	25	30	25	828
350						35	25	30	25	910
400						40	30	35	25	1020
500						40	30	35	25	1703

Recommended sizes
Additional possible sizes