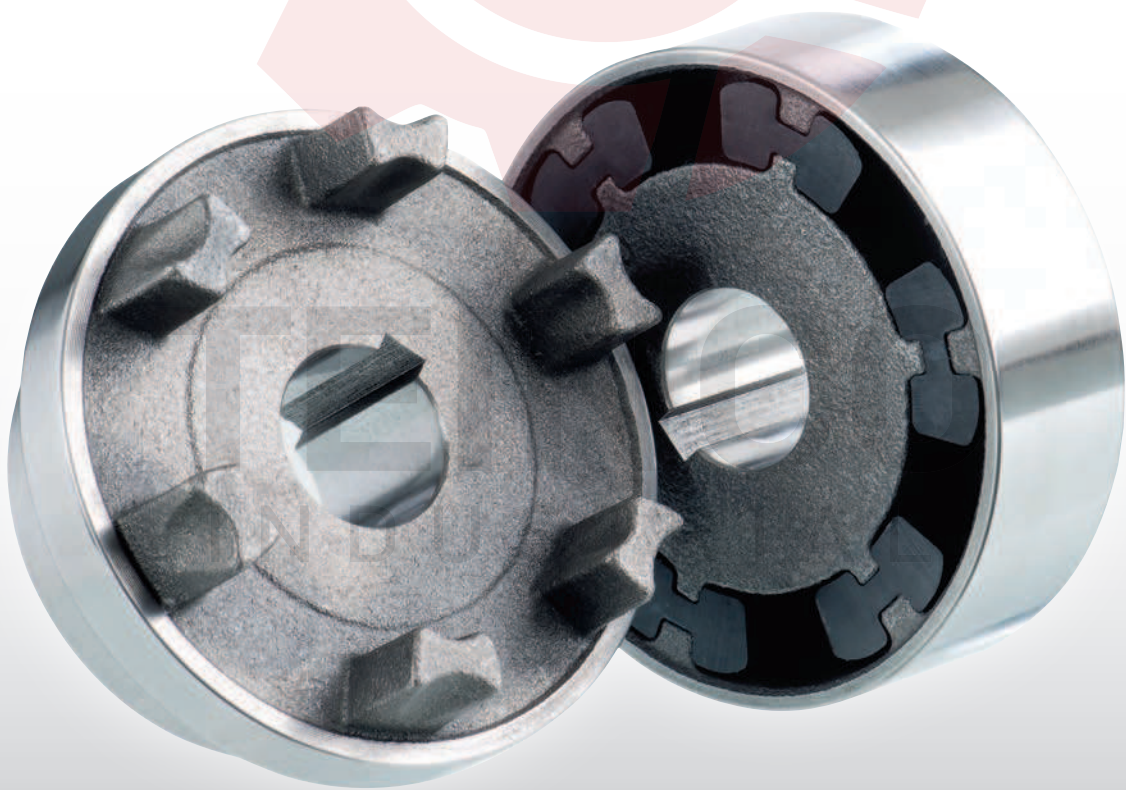


DESCH Pex Couplings



PX 12 - GB

Flexible DESCH Pex Couplings

The flexible DESCH Pex couplings are claw couplings with flexible elements to provide a torsionally flexible connection for shafts. The flexible elements excel in their wear resistance, ageing resistance and their temperature resistance from -30°C to $+80^{\circ}\text{C}$. Thanks to their flexibility, impacts, rotary vibrations and noises are effectively absorbed. The flexible elements are dimensioned such that radial, axial and angular movements between the two halves of the coupling are cancelled out. The flexible DESCH Pex couplings are of the plug-in type for installation and do not involve any particularly rigorous requirements with respect to alignment accuracy. The balancing quality is, in accordance with DIN-ISO 1940, in the quality range G 16. DESCH Pex couplings can be used in the whole of machine construction wherever a reliable shaft connection is needed between motor and machine.

Type B

The DESCH Pex type B coupling is fail-safe up to the fracture moment of the cast iron transmission cam and this provides maximum operational safety. The flexible elements can be supplied with hardness 80° shore A. With the fixed position of the flexible elements its deformability in axial direction is free, and so no damaging axial forces can act on the machine bearing even with alternating torque.

Selection

The torque of the machine T_{AN} is determined by:

$$T_{AN} [\text{Nm}] = 9550 \times \frac{P_{\text{Motor}} [\text{kW}]}{n [\text{rpm}]}$$

This torque T_{AN} multiplied by a safety factor „S“ depending on the application and the temperature factor S_T (see table page 5) gives the required nominal coupling torque T_{KN} .

$$\text{result: } T_{KN} \geq S \times S_T \times T_{AN}$$

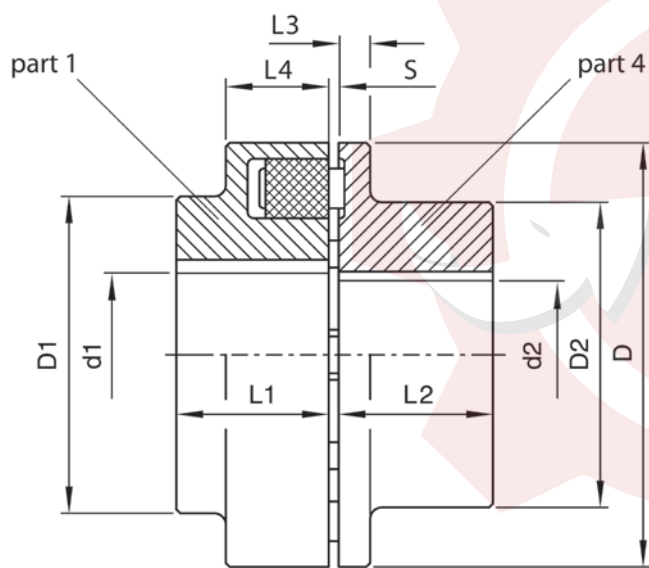
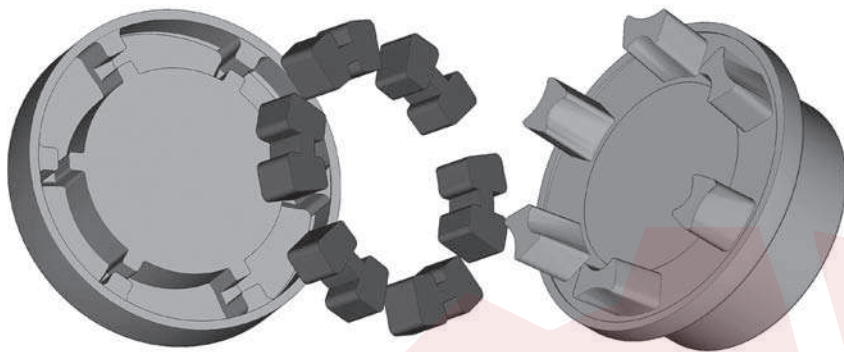
Wear indicator for DESCH Pex

The wear indicator for DESCH Pex couplings enables the condition of the flexible to be easily assessed. The wear condition can also be ascertained with the aid

of a stroboscope while the coupling is rotating. The production process can thus continue undisturbed. The wear indicator must be attached to the outside diameter of the coupling after the coupling has been fitted.



DESCH Pex – Type B



materials: coupling half EN-GJL-250
flexible elements NBR 80° Shore A

Type B

Size	Nominal torque Nm	Max. rotational speed rpm	Max. bore		D	L1	L2	D1	D2	L3	L4	S	Weight ¹⁾ kg		Moments of inertia ¹⁾ kgm ²	Max. shaft misalignment at rotational speed n = 1500 rpm ²⁾		
			d1	d2									Part 1	Part 4		axiale ΔK_x mm	radiale ΔK_r mm	angular ΔK_w °
58	19	7500	19	24	58	20	20	-	40	8	20	3	0,24	0,28	0,0001	0,2	0,2	0,15
68	34	7000	24	28	68	20	20	-	50	8	20	3	0,32	0,45	0,0002	0,2	0,2	0,15
80	60	6000	30	38	80	30	30	-	68	10	30	3	0,75	0,94	0,0006	0,2	0,2	0,12
95	100	5500	42	42	95	35	35	76	76	12	30	3	1,3	1,55	0,0013	0,2	0,2	0,12
110	160	5300	48	48	110	40	40	86	86	14	34	3	1,95	2,25	0,003	0,2	0,2	0,1
125	240	5100	55	55	125	50	50	100	100	18	36	3	3,05	3,6	0,006	0,25	0,25	0,1
140	360	4900	60	60	140	55	55	100	100	20	34	3	3,65	4,5	0,007	0,25	0,25	0,1
160	560	4250	65	65	160	60	60	108	108	20	39	4	5,05	5,95	0,01	0,3	0,3	0,1
180	880	3800	75	75	180	70	70	125	125	20	42	4	7,8	8,5	0,02	0,3	0,3	0,1
200	1340	3400	85	85	200	80	80	140	140	24	47	4	11	12,4	0,04	0,3	0,3	0,09
225	2000	3000	90	90	225	90	90	150	150	18	52	4	15	15,5	0,07	0,35	0,35	0,09
250	2800	2750	100	100	250	100	100	165	165	18	60	6	19,5	19,5	0,12	0,35	0,35	0,08

1) The information concerning weights and moments of mass inertia apply for medium holes.

2) The values mentioned are valid for 1500 rpm and may occur only separately. At multiple misalignments or higher speeds the values must be reduced.