

STÜWE®

SHRINK DISC TYPE HYD – HYDRAULIC



SHRINK DISC TYPE HYD – GENERAL INFORMATION

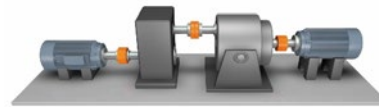
Application Description

The hydraulic shrink disc type HYD is based on the same principle as the type HSD mechanical shrink disc. As a result of the hydraulic tensioning only a fraction of the time is required for installation and removal compared with the mechanical type HSD.

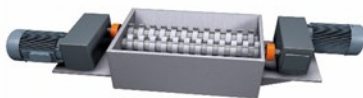
Areas of Use



Driveline
technology



Measurement &
testing equipment



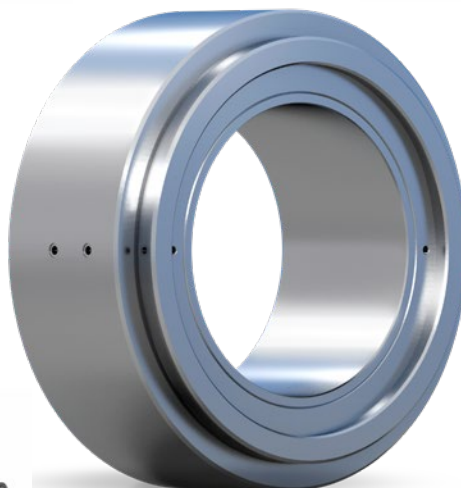
Crushing
equipment



Conveying
equipment



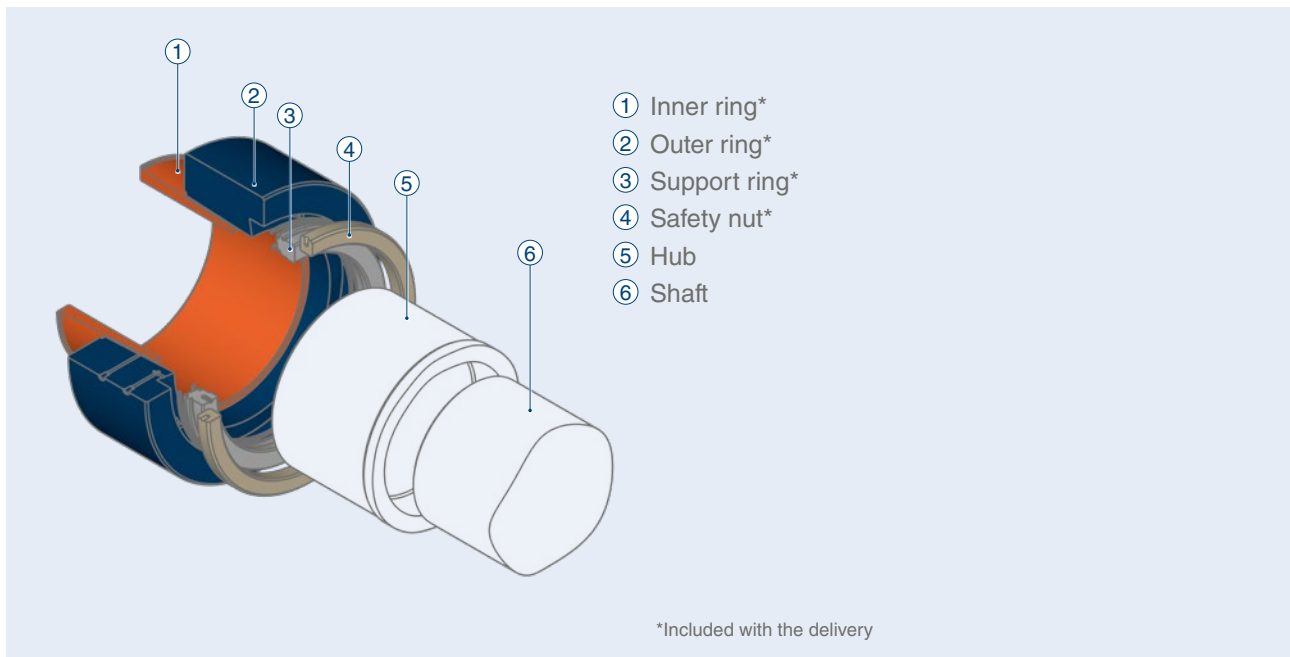
Agitation &
mixing equipment



Wind turbines

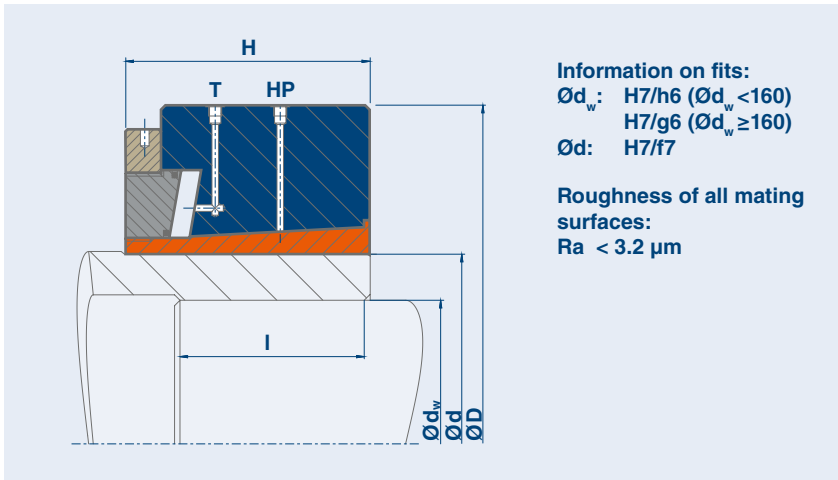
SHRINK DISC TYPE HYD – SERIES

Description	Shaft diameter	Transmissible torque	Features
HYD 12	90 - 680 mm	16 - 6211 kNm	average torques, compact series
HYD 22	50 - 860 mm	2.7 - 12349 kNm	high torques



All types may be protected against environmental influences by zinc and nickel coating or by a paint which has an appropriate corrosion protection class. We are able to achieve both desired colours which conform with the RAL colour range and products with lubricants in accordance with NSF H1. More detailed information on this may be found in this catalogue on page 151.

STÜWE® Shrink Disc Type HYD Series 12



Code

- M_t** Maximum transmissible torque of a shrink disc for $P_{ax} = 0$
- P_{ax}** Maximum transmissible axial load of a shrink disc for $M_t = 0$
- HP** High pressure is a maximum of 3800 bar
- T** Clamping pressure is a maximum of 450 bar

Shrink Disc Type HYD – Series 12

Type	d mm	d_w mm	M_t kNm	P_{ax} kN	D mm	I mm	H mm	kg
HYD 125 - 12	125	90	16	348	215	42	75	13
		95	18	377				
		100	20	406				
HYD 140 - 12	140	100	19	374	245	46	84	20
		105	21	401				
		110	24	429				
HYD 155 - 12	155	110	27	488	263	50	90	23
		115	30	520				
		120	33	551				
HYD 165 - 12	165	120	36	592	290	56	90	29
		125	39	628				
		130	43	663				
HYD 175 - 12	175	130	50	776	300	71	90	31
		135	55	818				
		140	60	861				
HYD 185 - 12	185	140	62	881	320	71	117	46
		145	67	924				
		150	73	968				
HYD 200 - 12	200	150	73	976	340	71	117	51
		160	85	1064				
		165	91	1108				
HYD 220 - 12	220	160	96	1194	370	80	130	66
		170	110	1297				
		180	126	1401				
HYD 240 - 12	240	180	140	1560	430	86	150	110
		190	159	1677				
		200	180	1796				
HYD 260 - 12	260	200	180	1795	430	95	145	98
		210	201	1916				
		220	224	2038				
HYD 280 - 12	280	220	228	2073	460	100	150	115
		230	253	2198				
		240	279	2323				

When ordering please state: (Type x Ød) e.g. HYD

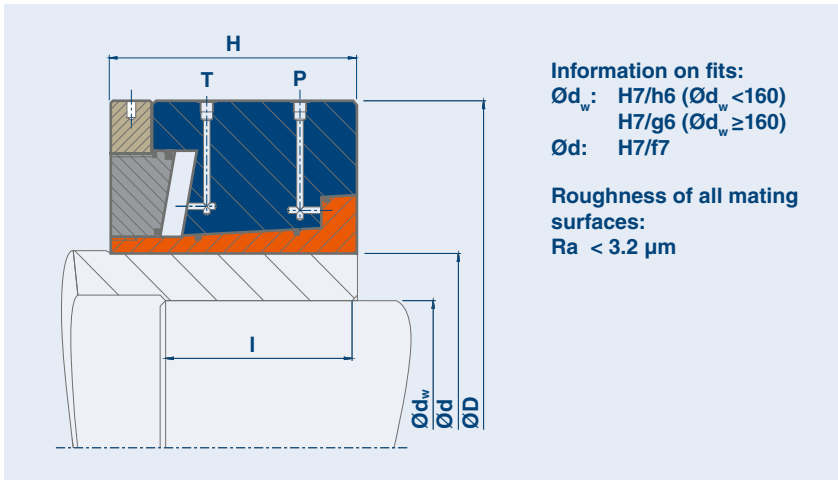
Shrink Disc Type HYD – Series 12

Type	d mm	d _w mm	M _t kNm	P _{ax} kN	D mm	l mm	H mm	kg
HYD 300 - 12	300	230	258	2242	485	110	160	134
		240	285	2371				
		250	313	2501				
HYD 320 - 12	320	250	348	2781	520	120	179	173
		260	381	2929				
		270	415	3077				
HYD 340 - 12	340	260	398	3063	570	120	179	216
		270	434	3215				
		280	472	3369				
HYD 360 - 12	360	280	467	3334	590	120	179	225
	350	290	505	3486				
	300	546	3638					
HYD 390 - 12	390	310	617	3978	650	135	200	311
	380	320	663	4143				
	330	711	4308					
HYD 420 - 12	420	330	718	4353	690	135	200	345
		340	768	4519				
		350	820	4686				
HYD 440 - 12	440	340	836	4917	720	160	240	449
		350	893	5100				
		360	951	5284				
HYD 460 - 12	460	360	944	5246	745	160	240	475
		370	1004	5429				
		380	1066	5612				
HYD 480 - 12	480	380	1221	6425	780	170	260	566
		390	1293	6631				
		400	1368	6839				
HYD 500 - 12	500	400	1335	6674	830	170	260	657
		410	1411	6881				
		420	1488	7088				
HYD 530 - 12	530	430	1524	7088	850	190	280	712
		440	1605	7294				
		450	1688	7501				
HYD 560 - 12	560	450	1673	7435	880	190	280	743
		460	1757	7640				
		470	1844	7846				
HYD 590 - 12	590	470	1987	8456	940	200	300	925
		480	2082	8676				
		490	2179	8896				
HYD 620 - 12	620	500	2236	8945	965	210	310	976
		510	2337	9166				
		520	2441	9389				
HYD 660 - 12	660	530	2728	10294	1040	210	310	1153
		540	2843	10529				
		550	2960	10764				
HYD 700 - 12	700	560	3278	11708	1100	220	320	1327
		580	3540	12207				
		600	3812	12708				
HYD 750 - 12	750	600	4555	15184	1260	240	350	2066
		620	4889	15772				
		640	5236	16361				
HYD 800 - 12	800	640	5446	17019	1310	260	370	2293
		660	5822	17642				
		680	6211	18267				

Further sizes on request, subject to technical changes.

When ordering please state: (Type x Ød) e.g. HYD 560 - 12 x 560

STÜWE® Shrink Disc Type HYD Series 22



Code

- M_t** Maximum transmissible torque of a shrink disc for $P_{ax} = 0$
- P_{ax}** Maximum transmissible axial load of a shrink disc for $M_t = 0$
- P** Release pressure is a maximum of 450 bar
- T** Clamping pressure is a maximum of 450 bar

Shrink Disc Type HYD – Series 22

Type	d mm	d_w mm	M_t kNm	P_{ax} kN	D mm	I mm	H mm	kg
HYD 62 - 22	62	50	2.7	107	130	33	60	5
		52	3.0	114				
		53	3.1	118				
HYD 80 - 22	80	55	3.1	112	155	33	60	6
		60	3.9	130				
		65	4.8	148				
HYD 100 - 22	100	70	7.6	217	185	45	70	10
		75	9.0	241				
		80	10.6	265				
		80	10.6	265				
HYD 125 - 22	125	90	18	390	230	45	75	16
		95	20	421				
		100	23	453				
HYD 140 - 22	140	100	25	495	263	50	84	24
		105	28	529				
		110	31	563				
HYD 155 - 22	155	110	33	592	300	50	90	34
		150	36	628				
		120	40	663				
HYD 165 - 22	165	120	40	667	320	53	102	44
		125	44	706				
		130	48	744				
HYD 175 - 22	175	130	50	770	320	53	102	42
		135	55	810				
		140	59	850				
HYD 185 - 22	185	140	74	1056	340	71	117	55
		145	80	1106				
		150	87	1155				
HYD 200 - 22	200	150	86	1151	370	71	117	65
		160	100	1249				
		165	107	1299				
HYD 220 - 22	220	160	105	1311	405	88	140	93
		170	121	1425				
		180	139	1540				

When ordering please state: (Type x Ød) e.g. HYD

Shrink Disc Type HYD – Series 22

Type	d mm	d _w mm	M _t kNm	P _{ax} kN	D mm	l mm	H mm	kg
HYD 240 - 22	240	180	145	1615	430	88	143	105
		190	165	1737				
		200	186	1861				
HYD 260 - 22	260	200	199	1988	460	100	160	142
		210	223	2123				
		220	249	2259				
HYD 280 - 22	280	220	285	2587	485	122	180	174
		230	315	2741				
		240	348	2896				
HYD 300 - 22	300	230	326	2833	520	120	190	198
		240	359	2991				
		250	394	3149				
HYD 320 - 22	320	250	397	3175	570	140	220	285
		260	434	3342				
		270	474	3510				
HYD 340 - 22	340	260	541	4162	640	140	220	374
		270	589	4363				
		280	639	4565				
HYD 360 - 22	360 350	280	646	4615	660	140	220	388
		290	699	4815				
		300	753	5022				
HYD 390 - 22	390 380	310	791	5101	690	140	220	412
		320	849	5304				
		330	909	5508				
HYD 420 - 22	420	330	850	5152	720	178	255	506
		340	910	5352				
		350	972	5552				
HYD 440 - 22	440	340	915	5384	740	168	255	530
		350	977	5584				
		360	1041	5785				
HYD 460 - 22	460	360	1016	5645	760	165	255	540
		370	1081	5842				
		380	1147	6039				
HYD 480 - 22	480	380	1386	7293	830	188	295	785
		390	1468	7526				
		400	1552	7760				
HYD 500 - 22	500	400	1720	8600	850	188	295	810
		410	1816	8859				
		420	1915	9118				
HYD 530 - 22	530	430	2141	9958	910	223	330	1045
		440	2252	10236				
		450	2366	10515				
HYD 560 - 22	560	450	2397	10653	980	223	330	1240
		460	2515	10934				
		470	2636	11216				
HYD 590 - 22	590	470	2726	11600	1020	230	360	1445
		480	2854	11892				
		490	2985	12185				
HYD 620 - 22	620	500	3203	12810	1070	230	360	1595
		510	3345	13119				
		520	3491	13428				
HYD 660 - 22	660	530	4079	15393	1160	245	380	2005
		540	4248	15734				
		550	4421	16076				
HYD 700 - 22	700	560	4501	16073	1210	260	420	2345
		580	4857	16749				
		600	5228	17428				

When ordering please state: (Type x Ød) e.g. HYD 390 - 22 x 380

Shrink Disc Type HYD – Series 22

Type	d mm	d _w mm	M _t kNm	P _{ax} kN	D mm	l mm	H mm	kg
HYD 750 - 22	750	580	4808	16579	1260	300	450	2615
		590	4990	16916				
		600	5176	17255				
HYD 775 - 22	775	610	5521	18101	1300	310	470	2948
		620	5719	18449				
		630	5921	18798				
HYD 800 - 22	800	640	6255	19546	1350	320	490	3280
		660	6690	20273				
		680	7141	21003				
HYD 850 - 22	850	680	7542	22183	1430	340	520	3840
		690	7786	22568				
		700	8033	22953				
HYD 900 - 22	900	700	8443	24123	1520	360	550	4752
		710	8707	24526				
		730	9247	25334				
HYD 950 - 22	950	740	10034	27119	1590	380	580	5429
		750	10329	27544				
		800	11871	29677				
HYD 1000 - 22	1000	820	12680	30927	1650	400	600	5951
		830	13018	31369				
		850	13708	32254				
HYD 1025 - 22	1025	840	13603	32388	1700	410	620	6567
		850	13956	32838				
		860	14314	33288				

Further sizes on request, subject to technical changes.

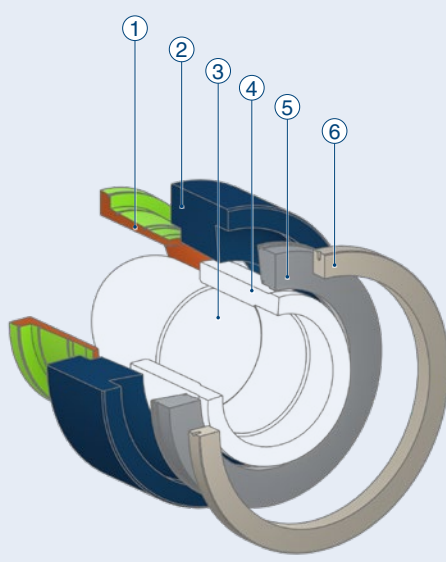
When ordering please state: (Type x Ød) e.g. HYD 900 - 22 x 900

You have not found what you are looking for in our comprehensive range of standard-products?
We will be happy to promptly prepare any form of custom-made product and development innovation
even using special materials such as 1.3974. Please feel free to contact us.

SHRINK DISC TYPE HYD – SPECIAL SOLUTIONS

STÜWE® HYD for Test Beds

Connection element for extremely high numbers of cycles

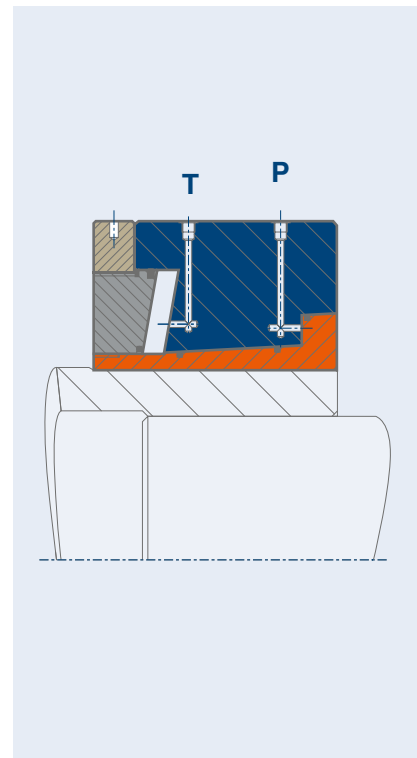


Benefits

- Smaller installation space
- Greater freedom for design
- Outside the flow of loads

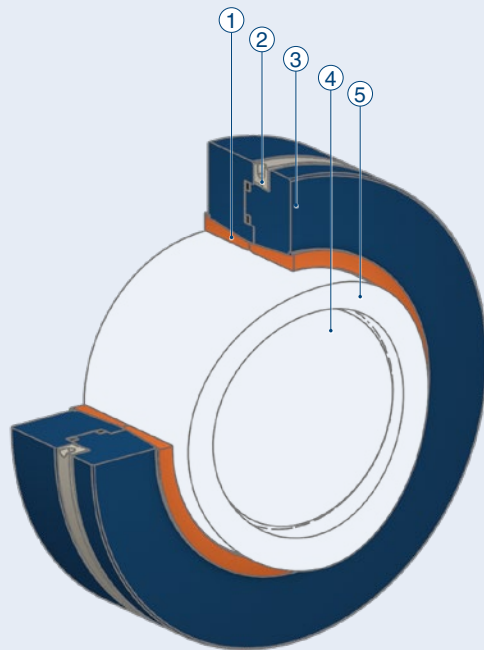
① Inner ring*
② Outer ring*
③ Hub
④ Shaft
⑤ Support ring*
⑥ Nut*

*Included with the delivery



STÜWE® Individual solution HYSD

Hydraulic connection element for particularly compact installation spaces



Benefits

- Less components
- Easier and safer installation

- ① Inner ring*
- ② Nut*
- ③ Outer ring*
- ④ Shaft
- ⑤ Hub

*Included with the delivery

