ETP-HYLOC®

Hydromechanical clamping element

For high torque levels in harsh environments.

The ETP-HYLOC® is ideally suited for use in difficult environments and extreme operating conditions, such as those encountered in the finishing industry, in rolling mills and straighteners or in the field of test bench construction. Even with high radial loads, the ETP-HYLOC® transmits a high level of torque, which can also be adjusted if necessary. In addition to its high load capacity, the ETP-HYLOC® excels through its fast mounting and dismantling.

Highlights

- High transmittable torque, which can be varied by adjusting the mounting pressure
- High radial power transmission
- Fast mounting/dismantling, even in systems where space is tight
- Good concentricity, even after being mounted multiple times
- Radial and axial connection possible

Lenze SELECTION

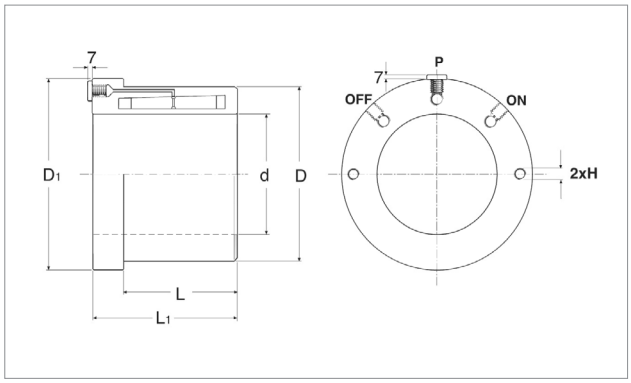
ETP-HYLOC®

Hydromechanical clamping element

Structure/function

The ETP-HYLOC® is based on the hydromechanical principle. The connection element comprises a double-walled steel sleeve with an integrated movable, conical piston. During mounting/ dismantling, the hydraulic pumps can be connected both radially and axially, as both connections are provided. If the piston is moved using the hydraulic pump, the double-walled sleeve expands evenly against the shaft and hub, thereby creating a fixed connection.

The oil is pressed into the piston's spiral grooves via connection P in such a way that the piston is easier to move. The standard installation pressure is 1,000 bar. After mounting, there is no longer any hydraulic pressure inside. For dismantling, the piston is moved in the opposite direction to release the connection. A high friction coating (HFC) can be used to double the level of transmittable torque.



ETP-HYLOC® technical specifications

ETP-HYLOC®	Dimensions					Transmittable torque or axial force at 1,000 bar							Moment of inertia	Weight
						Shaft h7		Shaft h8		Min. hub DN				
	d	D	D_1	L	L_1	M	F_A	M	F_A	Yield point [N/mm²]		H	J	
	[mm]	[mm]	[mm]	[mm]	[mm]	[kNm]	[kN]	[kNm]	[kN]	>300	>400		[kgm² · 10⁻³]	[kg]
50	50	77	101	56	82	2.6	70	2.4	70	110	105	M8	3.2	2.4
60	60	89	113	64	90	4.6	130	4.3	130	140	125	M8	5.4	3.1
70	70	102	122	74	100	7.9	210	7.4	200	170	145	M8	8.7	4.1
80	80	115	135	84	110	12.1	290	11.5	280	200	160	M8	14	5.4
90	90	128	148	94	120	17.1	380	16.2	360	235	180	M12	23	7.0
100	100	140	160	104	130	24.2	485	23.1	460	270	200	M12	34	8.6
110	110	154	173	114	140	32.9	595	31.5	570	295	220	M12	51	11
120	120	168	186	124	150	43.2	720	41.6	690	320	240	M12	76	14
130	130	182	200	134	160	53.8	825	51.4	790	350	260	M16	110	17
140	140	196	213	144	170	68.9	985	66.2	945	375	280	M16	150	21
150	150	210	227	154	180	85.4	1,135	82.3	1,095	400	300	M16	210	25
160	160	224	240	164	190	104	1,305	100	1,260	425	320	M16	290	30
180	180	252	267	184	210	150	1,675	146	1,625	480	360	M16	500	42
200	200	280	293	204	230	206	2,060	200	2,000	535	400	M16	830	56
220	220	308	320	224	250	273	2,485	266	2,415	585	435	M16	1,300	73

M ... Transmittable torque at $F_A = 0$
F_A ... Transmittable axial force at M = 0
D_N ... External diameter of the steel hub
H ... Thread for easy handling

Tolerances:
Shaft h7 or h8
Hub H7

We would be happy to support and advise you if you require individual dimensioning or modified designs.