

Electro Hydraulic Actuator Double acting - LP-HD

Double acting - LP-HD Single acting - LP-HS



LP-HD & LP-HS Range







About us

The pleasure of engineering and development of solutions for industrial automation was the initial incentive for KTC Systemtechnik. Klaus Seiler and Carsten Teichler, both experienced in the automation business for many years, established KTC Systemtechnik in 2010. Our technical team consist of employees, experienced in electrical engineering, hydraulics, mechanical engineering as well as control engineering (PLC). The company premisis for production and

administration cover about 500m² Since the founding of KTC, many interesting and large projects are realised. Our customers are valve manufacturer and engineering companies as well as end user from different areas like power stations, oil&gas, pipelines and chemical industries. Our company objectives are the satisfaction of our customers, employees and business partners. Hence, we develop our products and services continously. Regular professionel education is self-evident.







European and international norms and directives are the guidline for a quality system. We understand the use of these rules as a helpful guide for our corporate divisions. Compliance with standards ensures consistent and internationally recognised quality. Our products comply with current standards and guidelines. Out of our own conviction and as proof of quality for our customers and suppliers, we are certified according to

EN ISO 9001:2015

Norms and directives:

ATEX 2014/34/EU

DIN EN 13463

2006/42/EG

EN ISO 12100

EN ISO 13849

EN ISO 4413

DIN EN 61511-1

ISO 9001: 2015



Set of Components/Compo	nent	Hydraulic Li	inear Actuator					
Туре		KTC-LA-y-y	у-уу-Е-Т-у					
Manufacturer		KTC-Syster	rtechnik Gmb					
Component Type		Type A					61506-2	
Mode of Operation		Low deman	d operation					
Safety Function		Actuator mo with specific		osition	in specified tin	10		
Safe State		Actuetor in a	safe position					
				-				
	_	Failure R	tates (failure					
Total failure rate					0.895			
Failure Rate Distribution	Lun	Lang	procedenied	Large	rax valuable	Lanus	SFF [%]	
SUM (with Diagnosis)	9.751		0		144	6	99	
	Sp	ecification	of compon	ent Ar	chitecture			
Architecture	1	ool for it is the architecture of a single set of components/component of the analysed type.						
Hardware Fault Tolerance HFT		0	Due to HFT-0, one followines impact on the safety function. The influence of HFT on SIL cogniting is respected in (2) below.					
MTTR [N]		32	SETTR to the Smill SETTR has margin			ompowerbicompowerb	in case of failure.	
Diagnostic Coverage DC [%]	-	0 %	In case of moving antenatio disprovs in g. partial showless); DC = 0.1b. In case of implemented partial strain late; DC = 0.5 (miles depends on efficiency of partial stroke load), Seith Fichian Productivi SE indexember (signer DC in SE, capability of the set of compression or specific and in respectively (c) below (set EFT).					
	Ve	rification o	of SIL Capa	bility (examples)			
Proof Test Interval		6 month	ns 1 ye	nar	2 years	3 years	5 years	
PFD (Mg.) (EC 61004-6,83.2.2 kg.)	Ion FMEZA)	3,20 E-0	4 6,351	E-04	1,27 E-03	1,90 E-03	3,16 E-03	
(1) quantitative achievable (EC-01000 t Tel. 2)	SIL	SIL 3	SIL	SIL 3 SIL 2		SIL 2	SIL 2	
(2) qualitative achievable S (EC418092, Tal. 2)	IL		SIL 3 (I	or HFT	0; Type A; 90	% £ SFF <99%		
Achievable SIL = Min ((1)	(2))	SIL 3	SIL	3	SIL 2	SIL 2	SIL 2	
Calculated (concentramentoensignorum)		RBÜRO URBAI IV. 24 D-85604		,	Siring, 2012-10-28	d	Sec.	
	_					T.	eite 7 von 16	
100000, V10, ML-								
apprixTC Salarens (Appropriate	_		N - DiplIng.				_	

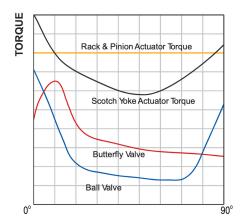












Advantage (Scotch Yoke)

The SUSIN I - TORK actuators provide increased torque at the open and close position, this closely matches the required torque for practical valve operation

- Increased torque at the open and close position.
- Compact design and size
- Extremely long cyclic life
- -Adjustable center stopper for both open & close position.





Why this range?

The KTC LP-HS range of actuators offer a unique reliable and with all the features of electrical actuator . best solution for electric fail-safe for both quarter-turn valves and dampers.

We combine

- Reliable Korean technology on electrical and electronics.
- Proven Scotch yoke technology on actuator
- German technology on precision of hydraulic control.

Why you need compressor and tubing to control less number of actuator?

When our self contained fail safe Actuators are ready!





Available in both quarter-turn double acting (30 to 4,600 Nm) and single acting (30 to 3,500 Nm), the actuators are offered with a wide range of operating speeds.



LP-HD & LP-HS - Technical data

Motor Voltage : 400 V 50/60Hz / 230V 50Hz

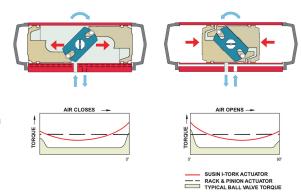
Power consumption : 180W bis 250W **Solenoid Valve** : 24VDC / 230V 50Hz

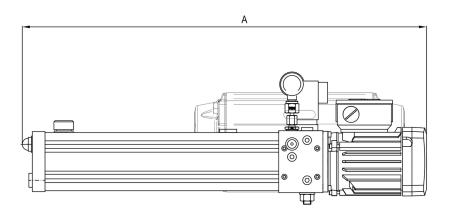
On Board pressure pmax. : 8,0bar

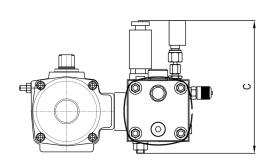
Speed : adjustable by throttle

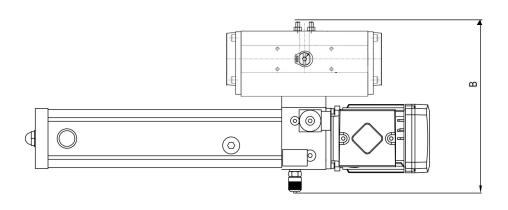
Medium : Hydraulic oil HLP, filtered min. 10μm

Ambient Temp : -20°C...50°C Harzadous Areas : Zone 1 and 2









		DIMENSION (mm	1)	STANDARD				
MODEL	A	В	С	Oil (L)	Flange ISO 5211	PCD		
LPHD & LPHS 45					F03/F05/F07	35/50/70		
LPHD & LPHS 50					F03/F05/F07	35/50/70		
LPHD & LPHS 55					F05/F07	00/50/70		
LPHD & LPHS 70					F05/F07	00/50/70		
LPHD & LPHS 75					F07/F10	00/70/102		
LPHD & LPHS 85					F05/F07	00/50/70		
LPHD & LPHS 100					F07/F10	00/70/102		
LPHD & LPHS 125					F10/F12	00/102/125		
LPHD & LPHS 160					F10/F14	00/102/140		
LPHD & LPHS 200					F12/F16	00/125/165		

UNIT: mm







	ANGLE							
MODEL	0 °	45°	90°					
LPHD 45	38	16	27					
LPHD 50	79	33	55					
LPHD 55	107	44	75					
LPHD 70	217	90	152					
LPHD 75	324	134	226					
LPHD 85	403	169	282					
LPHD 100	653	273	457					
LPHD 125	1250	521	876					
LPHD 160	2427	1015	1700					
LPHD 200	4635	1939	3245					

UNIT : N-m

Single acting Acting LP-HS - NC

MODEL EQ	ANGLE									
MODEL FC	0 °	55°	90°	90°	35°	0 °				
LPHS 45	29.3	10.5	14.7	12.3	5.5	8.7				
LPHS 50	59.1	21	30	25	12	19.9				
LPHS 55	79.8	71.8	42.9	32.1	16.2	27.2				
LPHS 70	159.8	55.7	85.3	66.7	34.3	57.2				
LPHS 75	243.1	82.8	122.8	103.2	51.2	80.9				
LPHS 85	301.1	104.5	154.2	127.8	64.5	101.9				
LPHS 100	489.5	168.1	248.3	208.7	104.9	163.5				
LPHS 125	940.2	303	475	401	209	309.8				
LPHS 160	1847.1	624.8	919.2	780.8	390.2	579.9				
LPHS 200	3519.1	1191.6	1736.8	1508.2	747.4	1115.9				



UNIT : N-m

Single acting Acting LP-HS - NO

MODEL FO	ANGLE									
MODEL FO	0 °	55°	90°	90°	35°	0 °				
LPHS 45	20.68	10.9	20.66	6.34	5.1	17.32				
LPHS 50	43.3	22	41.1	13.9	11	35.7				
LPHS 55	60.43	29.6	55.55	19.45	14.4	46.57				
LPHS 70	121.7	59.7	111.9	40.1	30.3	95.3				
LPHS 75	176.9	89.85	169.65	56.35	44.15	147.1				
LPHS 85	220.5	112.9	210.6	71.4	56.1	182.5				
LPHS 100	355	182.1	342.5	114.5	90.9	298				
LPHS 125	677.1	338.5	659	217	173.5	572.9				
LPHS 160	1311.9	674.4	1281.4	418.6	340.6	1115.1				
LPHS 200	2481	1299.7	2463.6	781.4	639.3	2154				



UNIT: N-m

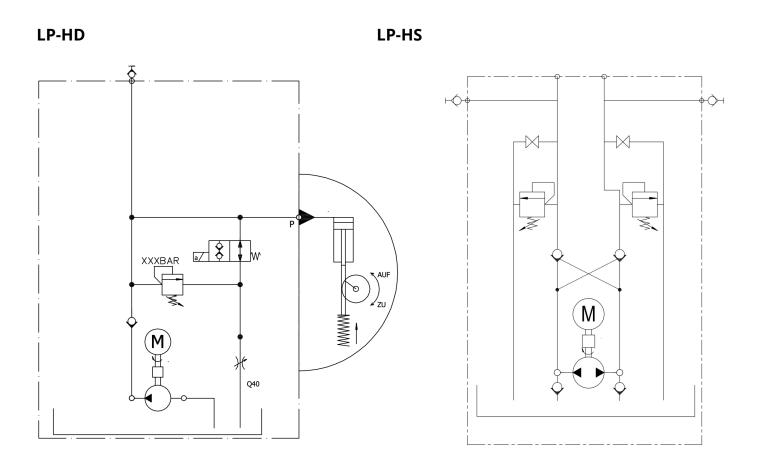


		Stroking time of Actuator										
MODEL NO	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	2.02	2.04	2.06	2.08
PD 45	14.40	7.20	4.80	3.60	-	-	-	-	-	-	-	-
PD 50	19.20	9.60	6.40	4.80	3.84	-	-	-	-	-	-	-
PD 55	-	20.40	13.60	10.20	8.16	5.83	-	-	-	-	-	-
PD 70	-	-	18.40	13.80	11.04	7.89	6.90	-	-	-	-	-
PD 75	-	-	-	29.70	23.76	16.97	14.85	9.90	-	-	-	-
PD 85	-	-	-	-	19.20	13.71	12.00	8.00	6.00	-	-	-
PD 100	-	-	-	-	-	22.63	19.80	13.20	9.90	5.28	-	-
PD 125	-	-	-	-	-	-	37.35	24.90	18.68	9.96	6.23	-
PD 160	-	-	-	-	-	-	-	45.2	33.9	18.08	11.30	9.04
PD 200	-	-	-	-	-	-	-	-	68.03	36.28	22.68	18.14

Table data unit - Sec

Schematic Diagram

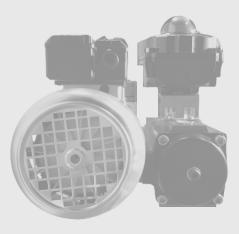
Low pressure hydraulic double acting Range - LP-HD Low pressure hydraulic single acting Range - LP-HS



Global Presence







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