

Hydraulic Cylinder New Product Development and Design

Product Model	
Application scenarios	
cylinder diameter (mm)	
rod diameter (mm)	
Leakage	
pressure	Normal working pressure (Mpa)
	Maximum work pressure (Mpa)
	Maximum starting pressure (Mpa)
Output	Maximum output force of rod cavity (N)
	Maximum output force of rodless cavity (N)
Operating conditions	Force form (Tension, lateral force, impact vibration conditions)
	Pressure holding requirements
	Other operating conditions
Installation method	Use posture (Horizontal, vertical, and inclined)
	Other installation methods
Speed of movement	Maximum reciprocating speed (m/s)
	Maximum rotational speed (m/s)
	Buffer requirements
Usage Environment	environment (Acids, alkalis, salts, prolonged moisture, dust)
	highest temperature (°C)
	minimum temperature (°C)
	Other environments
Surface treatment	Types of piston rod coatings (Hard chrome, milky white chrome + hard chrome, nickel chrome)
	Piston rod coating thickness (um)
	Piston rod surface hardening (High frequency, intermediate frequency, power frequency)
	High frequency, intermediate frequency, power frequency (Copper plating, nitriding, etc.)
Painting	Paint corrosion protection requirements
	Types of paint
	Topcoat color
	Paint film thickness (um)
Marking	Permanent identification requirements
	Signage Requirements
Package	Packaging method (Wooden pallets, work station equipment racks, wooden crates)
Other special requirements	
Previous Failure Modes	

Note: Please fill in all requirements carefully. These requirements will serve as the design input of corresponding requirements, our company will design according to the standard hydraulic cylinder. For separately. A simplified diagram of the hydraulic cylinder installation and connection, the hydraulic

conditions for the hydraulic cylinder. If you do not provide any or requirements that exceed those in this form, please submit them ic cylinder outline, and the main stress diagram can be attached.

产品设计过程控制及产品设计过程记录(设计卷宗形成):

- 1、设计前期输入：产品设计前期输入包含：营销给定的用户的需求，用户提供的产品外形图及图纸上的技术要求，以及技术员根据油缸的用途在设计过程中必须涉及到的一些必要的参数；此部分输入，存储到“客户需求”文件夹内（对于客户提供的纸质类文件，以扫描件的形式输入）：

液压油缸设计信息输入表

工作介质		
缓冲要求		
缸径(mm)		
杆径(mm)		
行程(mm)		
安装距(mm)		
泄漏量		
工作压力	最大工作压力(MPa)	
	正常工作压力(MPa)	
	最大启动压力(MPa)	
输出	有杆腔最大输出力(N)	
	无杆腔最大输出力(N)	
油缸主要运动形式	最大往复运动速度(m/s)	
	最大旋转速度(m/s)	
活塞杆要求	活塞杆镀层种类(硬铬、镍铬、乳白铬加硬铬)	
	活塞杆镀层厚度(um)	
	活塞杆表面淬火(高频、中频、工频)	
工作温度	最高温度(°C)	
	最低温度(°C)	
油漆	油漆防腐要求	
	油漆种类	
	面漆颜色	
	油漆厚度(um)	
与油缸安装联接部分各尺寸简图		
油缸外形图及主要受力图		
其他特殊要求		
说明:请客户对各要求进行认真填写,该要求将作为油缸的设计输入条件,如贵方没有提相应要求,我司将按常规油缸进行设计,对于超出本表格项的要求,可另提出.特力液压技术部联系电话:0736-7527352		

