

后 续 CONTINUATION

尊敬的用户：

感谢购买本公司生产的指针式推拉力计。在使用本仪器前请仔细阅读这本说明书，以便能正确使用。并请妥善保存说明书和保修单，以便万一有不了解或故障时，能给您带来帮助。

本说明书中的资料均以最新产品为依据,由于改进或其他变化,本说明书的记述可能与实际情况稍有出入，我公司将保留随时修改的权利，修改之处恕难一一相告。

Dear User:

We're indebted for your patronage to purchase this series handy push pull gauge. Before using the instrument, please carefully read the manual to use it rightly. Please keep the manual and the warranty well to give you help when you can't learn it or there is something wrong with it.

Data of the manual is equally had newest product as evidence, because of improvement or other change, description of manual may differ from practical situation. Our company will reserve the right corrected at any moment, it is difficult to list the corrected place one by one.

说明书

指针式推拉力计

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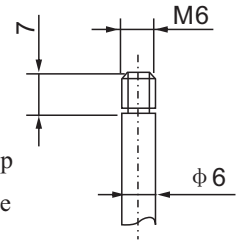
本测力计是小型便携式的拉力、压力测量仪器，具有高精度、易操作、可同时显示牛顿和公斤单位、携带方便之优点，而且有一个可作荷重峰值 (PEAK) 测量及连续荷重值 (TRACK) 测量切换使用的切换旋钮 (PEAK / TRACK 钮)。使用本仪器前请先详细阅读此说明书，以便充分运用本仪器所具有的功能，使测量时能得到准确的数值。本说明书适用NK、NLB、ALB等系列产品。

The NK、NLB、ALB series are analog force gauge with compact size and high accuracy. They are easy to operate. the scales provide both Newton graduations and kgf. handy to carry out. Single Click on a knob on the device will convert the movement of the indication needle from the peak force indication to .the tracking indication. Before using the instrument. Please particular read the manual to make gauge have a accurate gauged value.

(b) When changing knob is placed in [PEAK] and measure reaches max value of load, needle will stands still indicting peak force. If un-chain the needle, please press changing knob and needle will return to place [0].

6. Other

In order to make gauge have a right and stable measured value , please make full use of clamp attached. If your company wants to manufacture clamp fits measure, please refer to connected size of central stick shown picture from right.



7. Maintenance

- (1) Please don't apply load exceeding the max measuse range of gauge to avoid damaging instrument and producing trouble.
- (2) Don't put or use gauge in the place of low or high temperature and humidity. Please store and use it in the ruled environment.
- (3) If there's something wrong with it, please contact with original sales department or this corporation.

8. Table of appendix (Show page 5)

ENGLISH

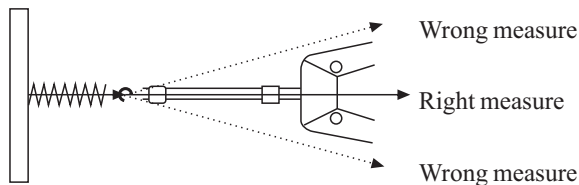
(b)When the machine is vertically placed to use, especially under the condition installing clamp, even don't apply load, needle will be lean, which is the deadweight reason of the machine and clamp.Turn adjustable circle of dial to have [0] aimed at needle, which can't affect veracity of measuring result.

NOTE:

Usually give the machine to apply the load exceeding the range of max measure load, spring of load test machine will gradually be bad and lead to measure value of load rightly. When using it, please don't overload to maintain life of the machine.

5. Measure

(1)Please tightly hold gauge by hands or appropriate stands to make a measure. When measuring, please place measured thing and gauge on the same straight line to test, if they aren't on the line, we don't measure value of load rightly.



(2)Change of load measuring

(a)When changing knob is placed in [TRACK], the needle moves in accordance with change of force.

NK系列测力计规格参数 (NK Series Parts Technical Specifications)

型号 Model	NK-50	NK-100	NK-200	NK-300	NK-500
最大测量值 Max load	50N 5kg	100N 10kg	200N 20kg	300N 30kg	500N 50kg
最小测量值 min load	5N 0.5kg	10N 1kg	20N 2kg	30N 3kg	50N 5kg
负荷分度值 Load graduation value	0.25N 0.05kg	0.5N 0.1kg	1.0N 0.2kg	2.0N 0.2kg	2.5N 0.5kg
示值误差 Value error	±1%				
推拉杆行程 Rod journey	10mm				
工作温度 Work temperature	20°C ±10°C				
运输温度 Garry temperature	-27°C ~ ±70°C				
相对湿度 Relative humidity	15%~80%RH				
工作环境 Work environment	周围无震源及腐蚀性介质 No vibrancy and no cautory				

NLB系列测力计规格参数 (NLB Series Parts Technical Specifications)

型号 Model	NLB-10	NLB-20	NLB-30	NLB-50	NLB-100	NLB-200	NLB-300	NLB-500
最大测量值 Max load	10N 2.2lb	20N 4.4lb	30N 6.6lb	50N 11lb	100N 22lb	200N 44lb	300N 66lb	500N 110lb
最小测量值 min load	1N 0.1lb	2N 0.4lb	3N 0.6lb	5N 1lb	10N 2lb	20N 4lb	30N 6lb	50N 10lb
负荷分度值 Load graduation value	0.05N 0.02lb	0.1N 0.04lb	0.2N 0.04lb	0.25N 0.11b	0.5N 0.2lb	1.0N 0.4lb	2.0N 0.4lb	2.5N 1.0lb
示值误差 Value error	±1%							
推拉杆行程 Rod journey	10mm							
工作温度 Work temperature	20°C ± 10°C							
运输温度 Garry temperature	-27°C ~ ± 70°C							
相对湿度 Relative humidity	15%~80%RH							
工作环境 Work environment	周围无震源及腐蚀性介质 No vibrancy and no cautory							

1. Technical specifications (Shown page 1~3)

2. Parts appellation (Shown page 4)

3. Appearance and install size (shown page 5)

4. Preparation before measure

Choose appropriate joint clamp and install it on the gauge before measure.

(1) Pull measure

Choose pull clamp and install it on the central stick of marked [PULL].

(2) Push measure

Choose push clamp and install it on the central stick of marked [PUSH].

(3) Use of prolong stick

When it isn't possible to touch measured thing, use prolong stick to install clamp.

NOTE:

When using prolong stick to measure, measured thing and gauge must be on the same straight line, if not, it isn't possible to measure right value of load.

(4) Confirmation and operation method of changing knob

(a) [PEAK] change of [TRACK]

Lightly press knob changing, at the same time, turn it to left to make mark “●” be in the place of [TRACK].

(b) [TRACK] change of [PEAK]

Turn knob to right, the knob springs and mark “●” is in the place of [TRACK].

(c) Points for attention after measuring

After finishing measuring, change mark “●”, please put it in the place of [PEAK]. If changing knob is put in the place of [TRACK] for a long term, life of inner springs lamination will shorten.

(5) Adjustment of indicator dial

(a) Please confirm whether needle aims at [0] of dial, if not, please turn adjustable circle of dial, and dial will run with it to make needle aimed at [0].

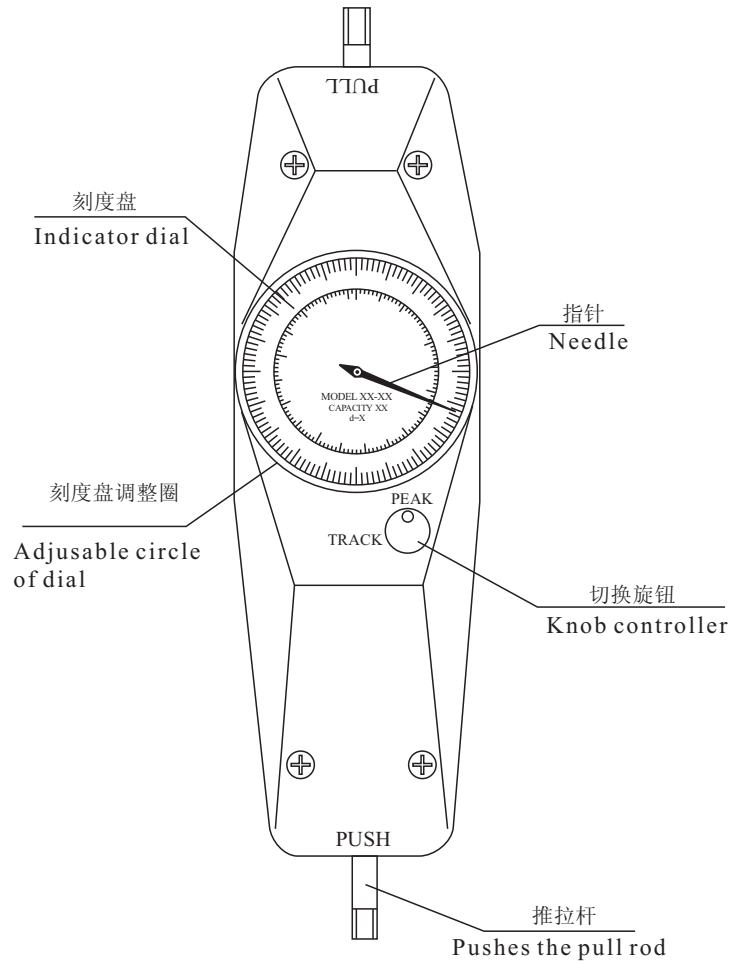
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ALB系列测力计规格参数 (ALB Series Parts Technical Specifications)

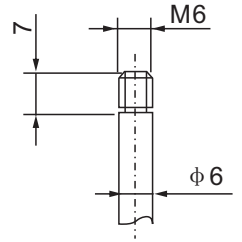
型号 Model	ALB-2	ALB-4	ALB-10	ALB-20	ALB-40	ALB-100
最大测量值 Max load	2lb 1.9kg	4lb 1.8kg	10lb 4.5kg	20lb 9kg	40lb 18kg	100lb 45kg
最小测量值 min load	0.2lb 0.1kg	0.4lb 0.2kg	1lb 0.5kg	2lb 1kg	4lb 2kg	10lb 5kg
负荷分度值 Load graduation value	0.01lb 0.01kg	0.02lb 0.02kg	0.05lb 0.05kg	0.1lb 0.1kg	0.2lb 0.2kg	0.5lb 0.5kg
示值误差 Value error	±1%					
推拉杆行程 Rod journey	10mm					
工作温度 Work temperature	20°C ± 10°C					
运输温度 Garry temperature	-27°C ~ ± 70°C					
相对湿度 Relative humidity	15%~80%RH					
工作环境 Work environment	周围无震源及腐蚀性介质 No vibrancy and no cautory					

结构名称 (Parts Appellation)



6、其他

为了使测力计能测得准确及稳定的测量值，请务必充分利用附带的夹具。用户如要制造适合测量用的夹具时，请参考右图所示的推拉杆连接尺寸。



7、保养和维修

- (1) 请勿施加超过测力计最大负荷的荷重，以免损坏仪器。
- (2) 请按规定妥善保管和存放，避免将测力计保管或使用于低温、低湿或高温、高湿及有腐蚀介质的场所，以免损坏仪器。
- (3) 发生故障请与原购买处或本公司联系。
- (4) 本产品自销售之日起一个月内，在正常使用及外观无破损情况下出现产品质量问题，客户凭销售发票原件、有效保修卡及完整包装到原购买处或本司更换相同型号规格的产品，更换以后的产品延续原产品的保修期限和条款。
- (5) 本产品自销售之日起一年内，在正常使用情况下，出现非人为故障属保修范围（用户自行拆机或在其他维修点维修后本公司不予保修），客户凭销售发票原件、保修卡到原购买处或本公司，可获本公司免费保修。
- (6) 对超过保修期限的产品，客户可向原购买处查询维修事宜或与本公司联系，由本公司提供有偿维修。
- (7) 本公司保留随时修改说明书的权利，修改时难以一一告知，敬请原谅。

8、随机附件明细表 (详见第5页表)

(0) 位。

- (b) 测力计垂直放置使用时, 特别是在安装有夹具的情况下, 即使没有施加负载, 指针也会偏向一边, 这是机器的自重所致。旋转刻度盘调整圈使刻度盘的 (0) 位与指针对准即可——这对测量结果的准确性没有影响。

注意:

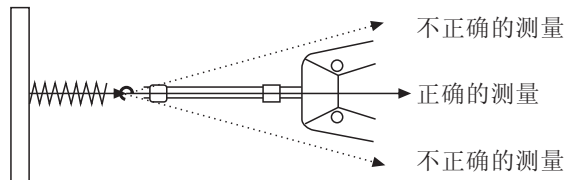
如经常对本机器施加超过最大测量范围的负载时, 荷重检出机构的弹簧性会逐渐劣化, 导致无法检出正确的荷重值。

使用时请注意不要施加超过最大测量范围的负载, 以维护测力计的使用寿命。

5、测量

- (1) 请牢固的握住测力计或将测力计安装于合适的机台上进行测量。

测量时请使被测量物和测力计成一直线, 否则将无法得到准确的荷重值。



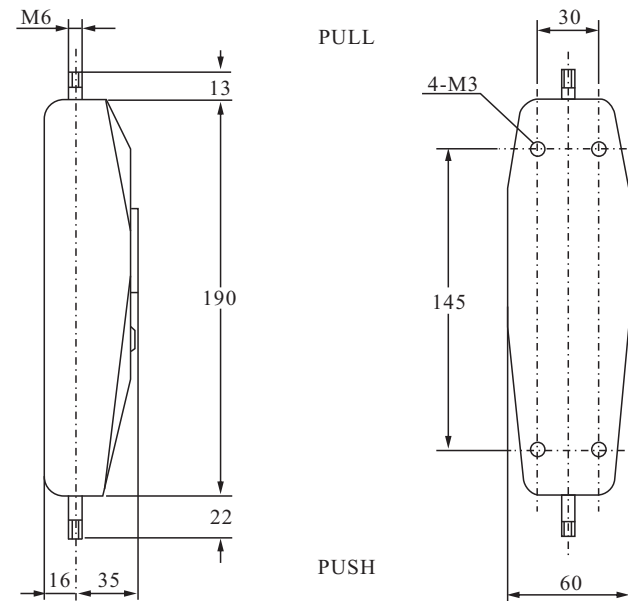
- (2) 测量中荷重的变化

- (a) 切换旋钮置于连续荷重值(TRACK)时, 指针会随着荷重值的变化而动作。
- (b) 切换旋钮置于荷重峰值(PEAK)时, 当测量达最大荷重值时, 指针会停在最大荷重值的位置。要将指针归零, 按下切换旋钮即可。

随机附件明细表 (Table of appendix)

名称 Name	型号Model							
	NK-10	NK-20	NK-30	NK-50	NK-100	NK-200	NK-300	NK-500
	NLB-10	NLB-20	NLB-30	NLB-50	NLB-100	NLB-200	NLB-300	NLB-500
数量Amount	ALB-2	ALB-4		ALB-10	ALB-20	ALB-40		ALB-100
压缩用夹具 push clamp	4	4	4	4	4	4	4	4
拉伸用夹具 pull clamp	1	1	1	1	1	1	1	1
加长杆 Added pole	1	1	1	1	1	1	1	1
使用说明书 User's manual	1	1	1	1	1	1	1	1
合格证保修卡 Certificate of quality	1	1	1	1	1	1	1	1

外形及安装尺寸 (Appearance and Install size)



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- 1、规格参数（见第1~3页表）
- 2、结构名称（见第4页图）
- 3、外形及安装尺寸（见第5页图）
- 4、测量前准备

选择合适的测量用接头夹具，安装到测力计上。

(1) 拉伸测量

将拉伸用夹具安装到推拉杆上标示拉（PULL）的一端。

(2) 压缩测量

将推压用夹具安装到推拉杆上标示压（PUSH）的一端。

(3) 加长杆的应用

当单凭拉、压用夹具无法接触到被测量物时，请利用加长杆来安装夹具。

注意：

使用加长杆测量时，被测物与测力计需在一直线上，否则无法测得准确的荷重值。

(4) 切换旋钮的使用方法

(a) 荷重峰值（PEAK）——连续荷重值（TRACK）的切换
将切换旋钮轻轻的往下压同时往左方向转，使旋钮的“●”标记停在连续荷重值（TRACK）的位置上。

(b) 连续荷重值（TRACK）——荷重峰值（PEAK）的切换
将切换旋钮往右方向转，此时旋钮弹出，旋钮的“●”标记停在荷重峰值（PEAK）的位置上。

(c) 测量后的注意事项

测量完成后，请将切换旋钮的“●”标记置于荷重峰值（PEAK）的位置上。如果长期置于连续荷重值（TRACK）的位置上，则内部的复位弹簧的使用寿命会缩短。

(5) 刻度盘的调整

(a) 请确认指针是否对准刻度盘的（0）位。如果没有对准，请旋转刻度盘调整圈，刻度盘会一齐动作，使指针对准