

# TECHNICAL FORM FOR SLOW-RETURN GAS SPRINGS APPLICATIONS

### 技术表格缓回气弹簧应用

代号: p169

日期:: 24/05/2024

1. Total initial force r	needed in the die / 模具F	听需的总初始力	daN (1 daN ≈ 1	kgf)
$\Rightarrow$ generated by (total	no. of gas springs to be in	nstalled)/由(安装的氮气弹簧	总数)gas spri	ngs / 个气弹簧提供
	nt the base / 气弹簧固定码		Siáis	
$\square$ on the lower pl	ate / 在下底板 gray	$\square$ on the upper plate $/$ $?$	在上底板	
<b>3.</b> Gas spring workin	g stroke (actually used)	)/气弹簧工作行程(实际使用	的):	mm
<b>4.</b> Approximate time f	or the slow-return stroke	/缓慢回程的大致时间:	seconds / 秒.	
				gher working temperature and 温度较高及其内部部件的磨损而发
<b>5.</b> Press stroke (when	working with these gas	springs) / 冲压行程(使用这些	·气弹簧时):	mm
	nots (cycles) per minute 分钟的最大模次数 (周期)	with press under continu	ous service /	
	shots per minute (SPM	1)/每分钟模次数		
	tual shots (cycles) per 数 (周期) (仅当冲压机未在	minute (only if the press i 连续下工作时)	s not working under (	continuous service)/
	actual shots per minut	te (SPM) / 实际每分钟模次		
DIE OPEN 模具打开			ACTUAL SHOTS 实际模次 VIRTUAL SHOTS UNDER CONTINUOUS 虚拟模次	S SERVICE
DIE CLOSED 模具闭合	TIME / 时		在连续工况下	

#### **7.** Use instructions / 使用说明:

It is important to respect the slow-return nitrogen gas spring use instructions (file name: p75). Other technical information and use instructions are available on the Bordignon catalogue (www.bordignon.com). The "needlescrew" for the return stroke adjustment is on the bottom cap as shown by the figure on the Bordignon catalogue / 务必遵守慢回氮气弹簧使用说明 (文件名: p75). Bordignon目录 (www.bordignon.com) 上提供了其他技术信息和使用说明. 回程调节的 "滚针螺钉"位于底部盖上,如Bordignon目录图所示

511 460 EN EN E	144.1 1 50	4 II DT	D 4/D
File: p169_EN-CN rev5	Written by RO	I Approved by DT	1 Page: 1/2



## TECHNICAL FORM FOR SLOW-RETURN GAS SPRINGS APPLICATIONS

**」技术表格缓回气弹簧应用** 

代号: p169

日期:: 24/05/2024

Further notice about proper use / 正确使用的附加警告:

Because of their non-standard internal construction (special seals, etc.), CRAL slow-return nitrogen gas springs are particularly subject to the detrimental effects caused by side forces (piston rod working stroke not perpendicular to the base of the gas spring, which is non-correct use). It is very important to use properly sized (possibly over-sized) and efficient guide elements in the tool, to ensure a perpendicular-to-the-base working stroke. /

由于其特殊的内部结构 (特殊密封件等), CRAL氮气弹簧特别容易受到侧向力的不利影响 (活塞杆的工作冲程与气缸底座不垂直,从而导致使用不当). 在模具上使用尺寸正确 (可能过大) 且高效的导向元件,以确保工作行程与底座垂直,这一点非常重要.

CRAL gas springs CRAL 慢回气弹簧



Properly sized and efficient guide elements 尺寸正确、高效的导向元件

#### 8. Disclaimer of warranties (responsibility) / 免责声明 (责任)

The slow-return nitrogen gas springs are used to solve problems in connection with the return of the nitrogen gas springs on press tools, dies and moulds. Bordignon cannot take any responsibility on the solution of the problem by the user. In other words, Bordignon does not know if the user will solve its problem with the use of the slow-return gas springs or not. In other words again, Bordignon will not accept any claim related to the slow-return gas springs functioning and Bordignon will not accept the restitution of the slow-return gas springs. If the user does not know the slow-return gas springs, Bordignon is available to send an animation that shows the slow-return gas springs functioning and to give a slow-return gas spring sample (CRAL nitrogen gas spring sample) for its test and its understanding. The sample will not be the nitrogen gas spring that will be used for the user application, the sample might have different dimension (diameter, stroke, fixing), different force, different time for the slow-return stroke / 慢回位氮气弹簧用于解决冲压模具,压铸模具和注塑模具上氮气弹簧的回位问题. Bordignon对用户解决问题不承担任何责任. 换句话说, Bordignon不知道用户能否使用缓回气弹簧解决问题. 换言之,Bordignon不会接受与缓回气弹簧功能相关的任何索赔,Bordignon也不会接受缓回气弹簧的召回. 如果用户不知道慢回气弹簧,Bordignon可以发送一个动画,显示慢回气弹簧的功能,并提供一个慢回气弹簧样品(CRAL氮气弹簧样品),供其测试和理解. 样品不是用于用户应用的氮气弹簧,样品可能具有不同的尺寸(直径,行程,固定),不同的力,不同的慢回程时间.

9. Comments / 评论
Date / 口地
Date / 日期 User (Company stamp & Signature) / 用户 (公司盖章和签名)
BORDIGNON S.r.l. (e-mail: bordignon@bordignon.com - fax: +39 0424 382359)

File: p169_EN-CN rev5	Written by RQ	Approved by DT	Page: 2/2
-----------------------	---------------	----------------	-----------