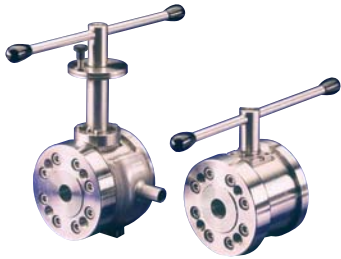

A+R®



工业球阀专家

A+R – Armaturen® GmbH - Germany

三千控制阀网
CV3000.com



适用于聚合化管线的PN63/
PN100金属阀座球阀



适用于脱硫管线(Claus Unit)
PN40有保温套的超大法兰
金属阀座球阀



适用于裂化装置和ANSI 600#-
1500#金属阀座的球阀



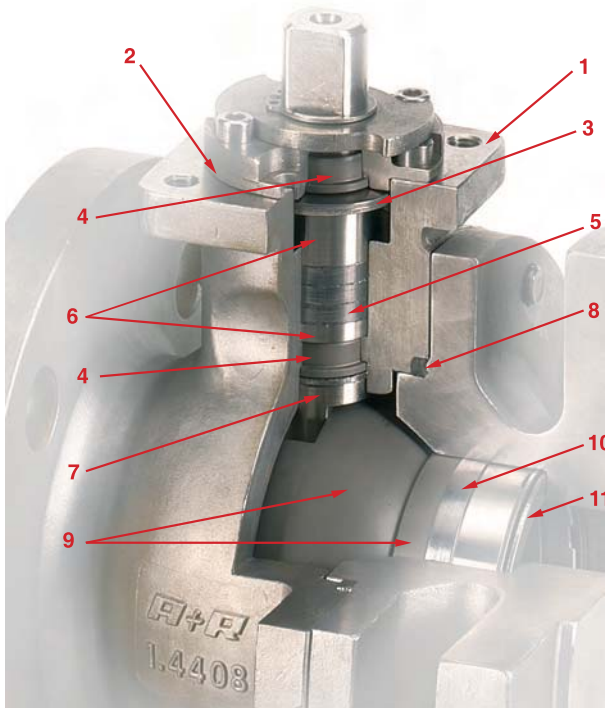
自从1969年起迄今，A+R Armaturen GmbH已在不同的工业领域供应在德国生产及制造的球阀。1989年，首次把高级的球阀工艺应用于石化、化学、炼油及钢铁工业。从此，A+R就一直在最有危险性的工业领域。提供特殊用途的金属密封阀座的球阀。

高精密性的金属密封系统能够确保，在高温650℃（1200°F）的境下安全运作。该金属密封球阀的规格与尺寸为：DN 15（1/2"）-DN 350（14"），PN 10-PN 40，150#-1500#，适用于含有磨蚀性颗粒的、有浸蚀性或腐蚀性的介质。A+R 710与510系列的球阀能够最有效地解决石化工业者所遇到的最困难的问题。

A+R在球阀的生产领域中，已经拥有超过44年的知识了。工厂目前大部分所使用的是最先进的CNC加工中心，能够有效地掌握加工的程序。具有最高的弹性与最高的责任心，是我们为什么能接受客户所指定的特殊规格产品生产并能保证准时交货的基本保证。

A+R目前正努力地向生产“完全无异常”的目标前进，并且改善工厂内部金属密封球阀的生产时间与安全系数。因此，A+R证明了给予客户的承诺。A+R拥有许多最高等级的、按照自己的要求订作的高温测试设备，用于检测公司新设计的球阀，以及依照客户所指定的要求规范，进行任何一项产品的测试，其可以测试的温度高达+900°（1650°F），对于阀体的最高测试压力为150 bar。另外，通过把氦气泄漏测试仪的接管与球阀的轴芯紧密连接，能够计算出密封系统的泄漏量，而A+R产品的所有测试结果，皆在标准泄漏量以下。

A+R金属密封球阀在球与阀座，是经过精密的研磨（mate-lapped）而制成的。对于较小尺寸的球阀，采用手动研磨或半自动式研磨，可以使球与阀座密封圈的密封接触面达到最佳的效果。极度细心的研磨及烧蓝能够确保μm级的公差。整个密封圈与球面之间的百分之百的接触，提供了一个完全无泄漏的密封系统。球与阀座的涂层是另一个非常重要的关键。只有具有最优良的专业工程及制造背景的制造商，才能生产出A+R的这种金属密封球阀。因此，为每一项特殊用途（如：高温、高压，或两者皆有，以及含有磨蚀性固体粉磨的、腐蚀性的介质等）选择最佳的涂层方式，是绝对必要的。这里，可以使用的涂层有：1.用HVOF法的碳化铬、碳化钨。2.用硼化技术法的硼化铁等。



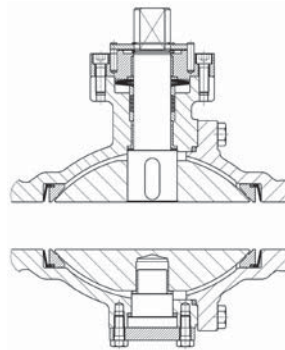
KHF 710系列 浮动球阀

规格尺寸: DN15至DN350 PN10至PN40
 1/2"至14" ANSI150#至ANSI600#
 1/2"至6" ANSI900#至ANSI1500#

- 1、符合ISO5211标准的执行器安装法兰
- 2、保护型上盖格兰
- 3、弹性加载
- 4、上部与下部的轴杆套筒
- 5、石墨盘根（通过氦气测试 $<10^{-8}$ mbar $1s^{-1} \cdot m^{-1}$ ≈零泄漏）
- 6、防压挤环
- 7、防阀杆飞外型设计
- 8、全支承的中法兰石墨密封圈
- 9、精密研磨的阀球与阀座环，表面硬度达到：HV 1600(HRC>80)
- 10、完全保护起来的石墨密封环，不与侵蚀介质接触
- 11、带有弹性加载的阀座系统

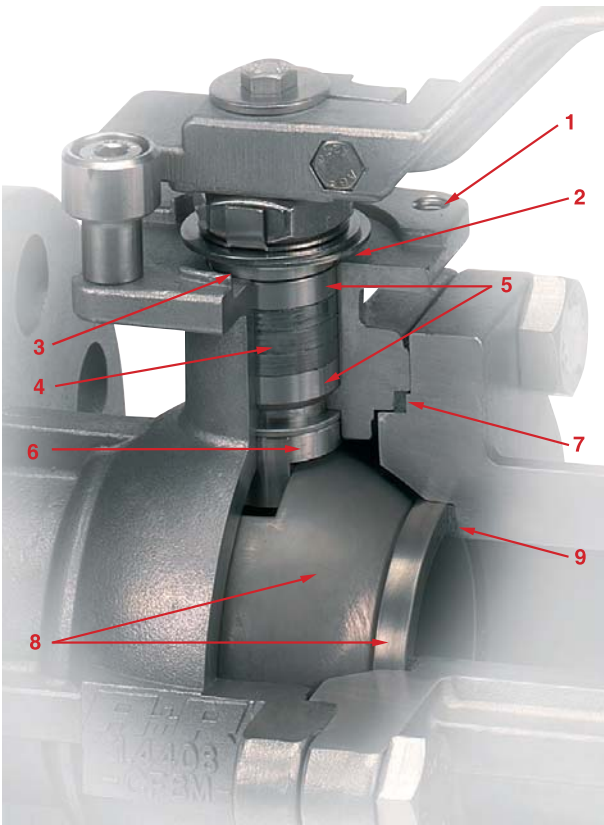
KHF 710系列 具有双向密封的固定球阀

规格尺寸（可选性）：DN80至DN350 3"至14"

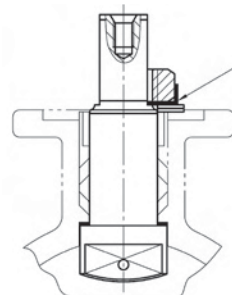


KHF 510系列 浮动球阀

规格尺寸: DN15至DN350 PN10至PN40
 1/2"至14" ANSI150#至ANSI600#



- 1、符合ISO5211标准的执行器安装法兰
- 2、弹性加载
- 3、格兰套筒
- 4、石墨盘根（通过氦气测试 $<10^{-8}$ mbar $1s^{-1} \cdot m^{-1}$ ≈零泄漏）
- 5、防压挤环
- 6、防阀杆飞外型设计
- 7、全支承的中法兰石墨密封圈
- 8、精密研磨的阀球与阀座环，表面硬度达到：HV 1600(HRC>80)
- 9、石墨负荷环



螺帽边有一个过度扭力防止器能防止因扭力过度而损坏盘根。



组装前

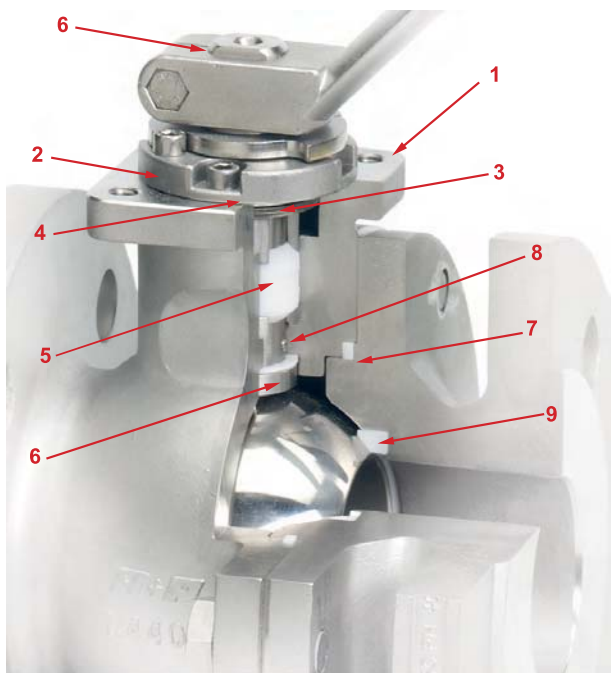
组装后

在氯硅烷管线中使用了10年的DN 300（12”）球阀，经过离线检验与维修后重新再使用。

全封闭的弹性加载阀座，能确保它与介质之间的磨损最小化。

球阀选型与石化工业适用介质对比表：

| 球阀系列 | 连接方式 | 公称口径 | 公称压力与温度 | 适用介质 | 阀体材质&阀芯材质 | 表面硬化方式 |
|--|--|------------------------------|---|---|---|--|
| 710 盘根 石墨 弹性加载 阀座 金属涂层 弹性加载 浮动球与固定球 | 法兰 EN DIN ASME RF、RTJ、SF 其它请咨询 | DN 15至 DN 350 1/2”至14” | PN 10至PN 40 150# 至 1500# +650°C 1200°F | 具有磨蚀性粉末的，侵蚀性，有污染的介质，泥浆，煤粉，沥青油，冶金介质，异丙基苯，酚，氯硅烷，毒气，多晶硅，有机硅，流化催化裂化过程，连续催化重整过程，流化焦化器，脱硫，聚丙烯，聚乙烯，对苯二酸盐，聚苯乙烯催化剂 | WCB, A105 1.4408 (316SS) 1.4308 (304SS) 1.4539 HasC Ti Duplex | A、HVOF： 碳化钨， 碳化铬， 斯太莱合金， B、硼化物： 硼化铁 硼化二铁 |
| 510 盘根 石墨 弹性加载 阀座 金属涂层 石墨涂层 浮动球 | 法兰 EN DIN ASME RF、RTJ、SF 其它请咨询 | DN 15至 DN 350 1/2”至14” | PN 10至PN 40 150# 至 600# +350°C 660°F | 具有磨蚀性粉末的，侵蚀性，有污染的介质，泥浆，煤粉，沥青油，冶金介质，毒气，工业清洁剂，烟灰，丁二烯，苯二烯，异丙基苯，酚 | WCB, A105 1.4408 (316SS) 1.4308 (304SS) 1.4539 HasC Ti Duplex | A、HVOF： 碳化钨， 碳化铬， 斯太莱合金， B、硼化物： 硼化铁 硼化二铁 |



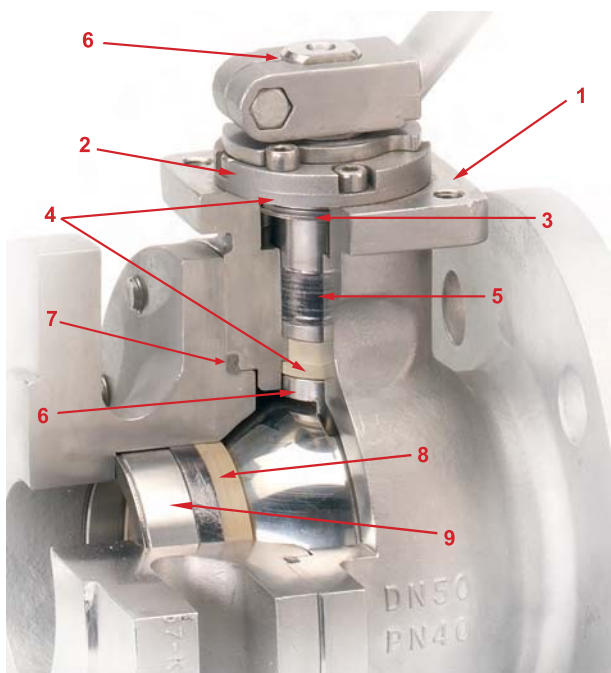
KHF 510 系列 浮动式高性能球阀

规格尺寸: DN15至DN350 PN10至PN40

1/2"至14"

ANSI150#至ANSI600#

- 1、符合ISO5211标准的执行器安装法兰
- 2、保护型上压盖
- 3、弹性加载
- 4、轴杆套筒
- 5、盘根 (通过氦气测试 $<10^{-8}$ mbar $1s^{-1} \cdot m^{-1}$ ≈零泄漏)
- 6、防阀杆飞出型设计, 双D轴杆设计
- 7、完全支承的中法兰密封圈
- 8、防静电
- 9、完全支承的PTFE+25%玻璃纤维密封阀座垫圈 (可选择性密封垫圈PEEK, 纯PTFE, PTFE+50%不锈钢, PTFE+33%碳钢, 或碳钢石墨)



KHF 710 系列 弹性加载阀座高性能球阀

规格尺寸: DN15至DN350 PN10至PN40

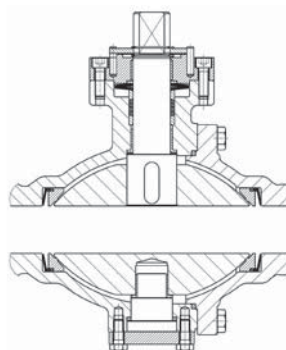
1/2"至14"

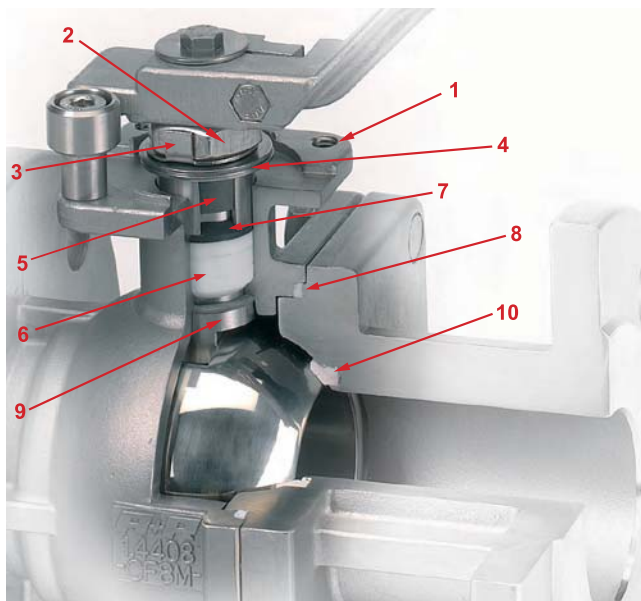
ANSI150#至ANSI600#

- 1、符合ISO5211标准的执行器安装法兰
- 2、保护型上压盖
- 3、弹性加载
- 4、上部与下部轴杆套筒
- 5、盘根 (通过氦气测试 $<10^{-8}$ mbar $1s^{-1} \cdot m^{-1}$ ≈零泄漏)
- 6、防阀杆飞出型设计, 双D轴杆设计
- 7、完全支承的中法兰密封圈
- 8、PTFE密封阀座垫圈 (可选择性密封垫圈PEEK, PTFE+25%玻璃纤维, 纯PTFE, PTFE+50%不锈钢, 或PTFE+33%碳钢)
- 9、弹性加载阀座系统

KHF 710 系列 具有双向密封的固定球球阀

规格尺寸 (可选性): DN80至DN350 3"至14"

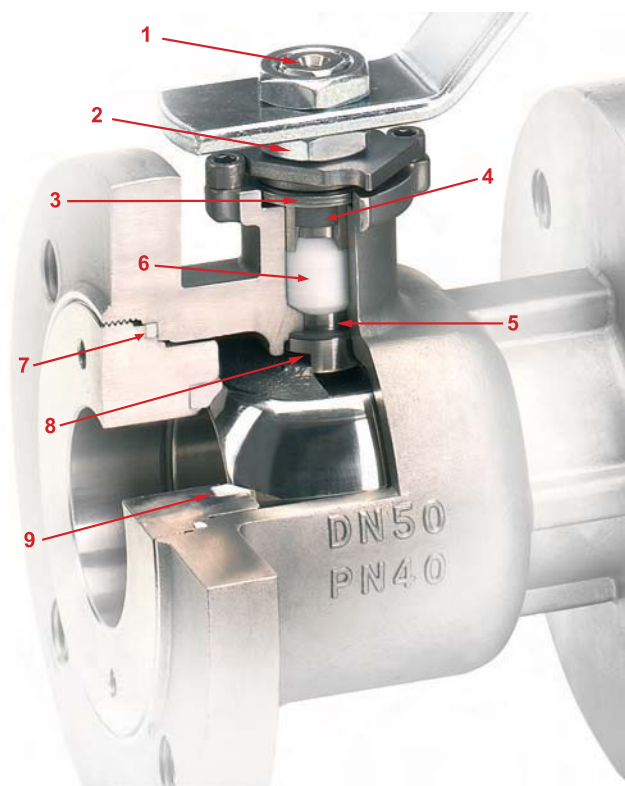




KHL 510 系列 浮动式通用球阀

规格尺寸: 1/2"至6" ANSI150#至300#
DN15至DN150 PN10至PN40

- 1、符合ISO5211标准的执行器安装法兰
- 2、可调整性螺帽与扭力防止器
- 3、锁紧螺丝
- 4、弹性加载
- 5、轴芯套筒
- 6、盘根（通过氦气测试 $<10^{-8}$ mbar l s⁻¹·m⁻¹≈零泄漏）
- 7、防静电
- 8、全支承的中法兰密封圈
- 9、防阀杆飞出型设计，双D轴设计
- 10、完全支承的PTFE+25%玻璃纤维密封阀座垫圈（可选择性密封垫圈PEEK，纯PTFE，PTFE+50%不锈钢，PTFE+33%碳钢，或碳钢石墨）

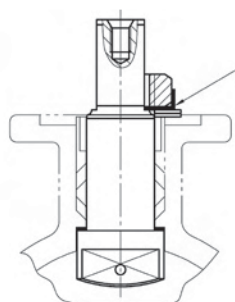


KHX 540 系列 浮动球隔离式球阀

规格尺寸: DN25至DN100
PN10至PN40

- 1、符合ISO5211标准的执行器安装法兰
- 2、可调整性螺帽与扭力防止器
- 3、弹性加载
- 4、轴杆套筒
- 5、防静电
- 6、盘根（通过氦气测试 $<10^{-8}$ mbar l s⁻¹·m⁻¹≈零泄漏）
- 7、完全支承密封圈，可防止过度扭力
- 8、防阀杆飞出型设计
- 10、完全支承的PTFE+25%玻璃纤维密封阀座垫圈

可选择性搭配使用ISO5211执行片，即可直接安装执行机构。



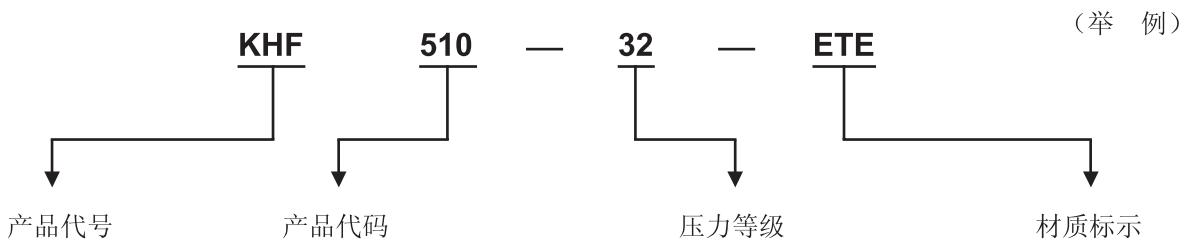
螺帽边有一个过度扭力防止器
能防止因扭力过度而损坏盘根

球阀选型与适用介质对比表:

| 产品代号 | 产品系列 | 密封方式 | 适用温度 | 公称口径压力 | 适用介质* | 国际认证** |
|------|------------|--------------|-------------|--|---|---|
| KHF | 510 | PTFE+25%玻璃纤维 | -50℃至+200℃ | DN 15至DN 300 PN 10至PN 40 DIN EN 欧标 浮球式石墨密封球座 (可选性) | 炼油, 石化, 化工, 泥浆 & 纸浆, 液化石油气/液化天然气 瓦斯, 炼钢, 电力, 天然瓦斯, 毒气 | 欧盟PED, 德国环境空气保护规程TA-Luft 2002, 德国AD-2000, 防火测试BS6755-P2 俄罗斯GOST-R,RTN |
| | 510 | PEEK聚醚醚酮 | -10℃至+260℃ | | | |
| | 510 | 碳钢石墨 | -50℃至+350℃ | | | |
| | 511 | PTFE+55%不锈钢 | -50℃至+230℃ | | | |
| | 513 | 纯PTFE | -120℃至+180℃ | | | |
| 514 | PTFE+33%碳钢 | -50℃至+230℃ | | | | |
| KHF | 710 | PTFE+25%玻璃纤维 | -50℃至+200℃ | DN 15至DN 300 PN 10至PN 40 DIN EN 欧标 浮球式弹性加载阀座 固定式 (可选性) | 同510系列并包括其它 因受热而会膨胀的介质, 如: 丙烷, 丁烷, 燃料, 蒸气 | 欧盟PED, 德国环境空气保护规程TA-Luft 2002, 德国AD-2000, 俄罗斯GOST-R,RTN |
| | 710 | PEEK聚醚醚酮 | -10℃至+260℃ | | | |
| | 710 | 碳钢石墨 | -50℃至+350℃ | | | |
| | 711 | PTFE+55%不锈钢 | -50℃至+230℃ | | | |
| | 713 | 纯PTFE | -120℃至+180℃ | | | |
| 714 | PTFE+33%碳钢 | -50℃至+230℃ | | | | |
| KHL | 510 | PTFE+25%玻璃纤维 | -50℃至+200℃ | 1/2" 至6" ANSI150#至300# DN 15至DN 300 PN 10至PN 40 ASME美标 浮球式石墨密封球座 (可选性) | 化工, 石化, 贮罐, 泥浆 & 纸浆油漆, 瓦斯, 毒气, 液化石油气/ 液化天然气, 电力 | 欧盟PED, 德国环境空气保护规程TA-Luft 2002, 德国AD-2000, 防火测试BS6755-P2 俄罗斯GOST-R,RTN |
| | 510 | PEEK聚醚醚酮 | -10℃至+260℃ | | | |
| | 510 | 碳钢石墨 | -50℃至+350℃ | | | |
| | 511 | PTFE+55%不锈钢 | -50℃至+230℃ | | | |
| | 513 | 纯PTFE | -120℃至+180℃ | | | |
| 514 | PTFE+33%碳钢 | -50℃至+230℃ | | | | |
| KHX | 540 | PTFE+25%玻璃纤维 | -50℃至+200℃ | DN 15至DN 100 PN 10至PN 40 DIN EN 欧标 浮球式 | 普通行业, 可直接安装 执行机构 | 欧盟PED, 德国环境空气保护规程TA-Luft 2002, 德国AD-2000, |

* 有关产品业绩, 请咨询 ** 有关其它国际认证, 请咨询

A+R® 球阀的型号结构



KHF
KHL
KHX

510 球标示

5 = 浮球式 (选择性) 石墨或O型环密封式球座
7 = 浮球式或固定式弹性加载密封式阀座

510 轴心标示

1 = 双D扁型轴心
4 = 依照ISO 5211方形规范轴心

510 密封材质标示

0 = A+R 标准密封材质
1 = PTFE+50% 不锈钢密封阀座*
3 = 纯PTFE 材质密封阀座*
4 = PTFE+33% 碳钢密封阀座*

32
DIN EN 558-1 ROW 27,
PN 10 - 40
欧标短型法兰面间距

33
DIN EN 558-1 ROW 1,
PN 10 - 40
欧标长型法兰面间距

A15 / A30 / A60
ASME B 16.5,
B16.10,
150# / 300# / 600#
美标法兰面间距

A90 / A150
ASME B 16.5,
B16.10,
900# / 1500#
美标法兰面间距

ETE 阀体材质

E = 不锈钢, 如: 1.4408, CF8M
S = 碳钢, 如: 1.0619, WCB
H = 合金, 如: 哈氏合金, 蒙乃尔, 钛等

ETE 球座材质

T = PTFE+25%玻璃纤维, 纯PTFE
P = PEEK 球座, 石墨密封垫圈
K = 碳钢球座, 石墨密封垫圈
G = 金属硬密封球座, 石墨密封垫圈

ETE 钢球材质

E = 不锈钢, 如: 1.4408, CF8M
H = 合金, 如: 哈氏合金, 蒙乃尔, 钛等

注: KHF—盘根自调型; KHL—盘根可调型。

设计特点:

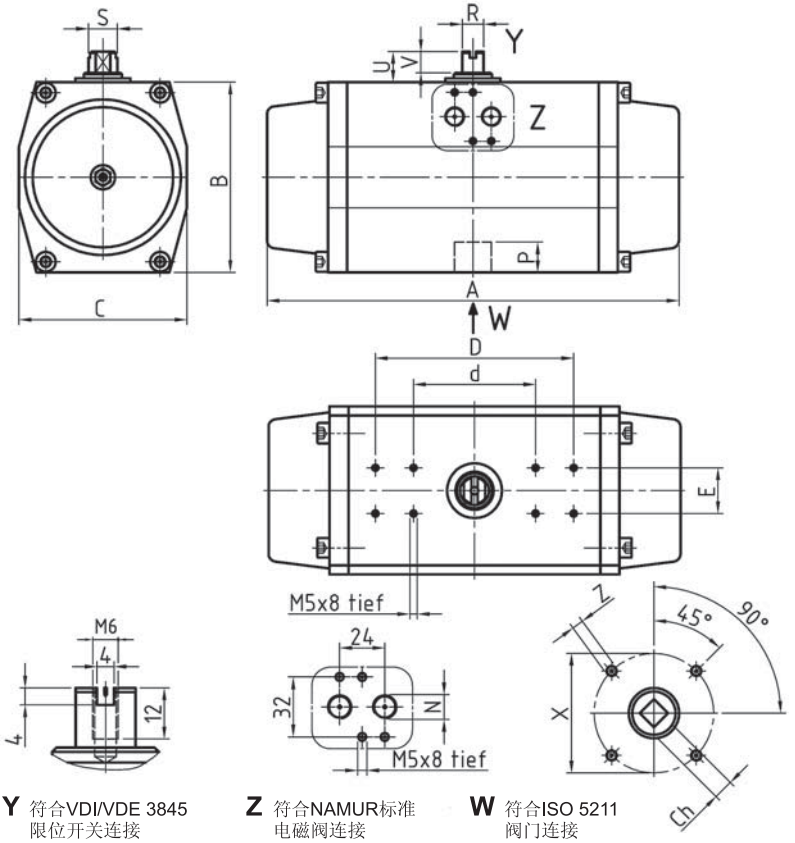
- 1、双活塞齿轮与齿条式设计: 提供了高效能, 快动作, 长寿命, 紧凑且对称的结构, 可任意位置安装, 可在现场逆转转动方式。
- 2、一件式防吹出的转轴: 完整地由实心棒材加工而成, 给予了绝对的操作安全。
- 3、两个独立作用的不锈钢行程限制器: 可简单而精确地调整两个方向上的行程。
- 4、模压成形的铝合金壳体和端盖: 允许室内外使用。
- 5、长的不锈钢端盖螺栓: 可在拆卸时使ARSE系列单作用执行器的弹簧得到完全的松弛, 从而保证了现场操作安全。
- 6、足量润滑过的运动部件: 允许长期使用而不需润滑。
- 7、NAMUR标准的电磁阀安装盘: 可直接安装各种品牌的电磁阀
- 8、VDI/VE 3845标准的槽口: 提供了限位开关, 定位器等的自定心转动。

基本数量

操作压力: 2-10 bar(ARSD 双作用); 3-10 bar (ARSE 单作用)
 温度范围: -20℃~+80℃ (标准); -20℃~+150℃ (可选项)
 行程: 90° (±5°可调)

主要材料

| | | | | | | | |
|-------------|----|----|----------|----------|----|------|-------|
| 壳体 | 端盖 | 活塞 | 活塞和齿条的导块 | 转轴 | 弹簧 | O形圈 | 螺栓和螺母 |
| 经阳极氧化处理的铝合金 | | | 乙缩醛树脂 | 带防腐涂层的碳钢 | | 丁腈橡胶 | 不锈钢 |



| 空气损耗量 [dm³] | | | 开 / 关时间 [s] | | |
|-------------|-------|-------|-------------|--------|-------|
| Type | ↻ | ↺ | Type | ARSD | ARSE |
| ARS-1-25 | 0,08 | 0,10 | ARS-1-25 | < 0,5 | < 0,5 |
| ARS-2-63 | 0,12 | 0,16 | ARS-2-63 | < 1 | < 1 |
| ARS-3-75 | 0,24 | 0,44 | ARS-3-75 | < 1 | < 1 |
| ARS-3.5-85 | 0,48 | 0,56 | ARS-3.5-85 | < 1 | < 1 |
| ARS-4-100 | 0,68 | 0,96 | ARS-4-100 | < 1 | < 1 |
| ARS-4.5-115 | 1,00 | 1,60 | ARS-4.5-115 | < 1 | < 1 |
| ARS-5-125 | 1,40 | 2,16 | ARS-5-125 | < 1,25 | 1,5-2 |
| ARS-5.5-140 | 1,60 | 2,56 | ARS-5.5-140 | < 1,5 | < 2 |
| ARS-6-160 | 3,20 | 4,00 | ARS-6-160 | 1,5-2 | 2-3 |
| ARS-8-200 | 5,30 | 8,60 | ARS-8-200 | 3-4 | 4-6 |
| ARS-10-250 | 14,20 | 16,50 | ARS-10-250 | 5-6 | 7-8 |

外形尺寸

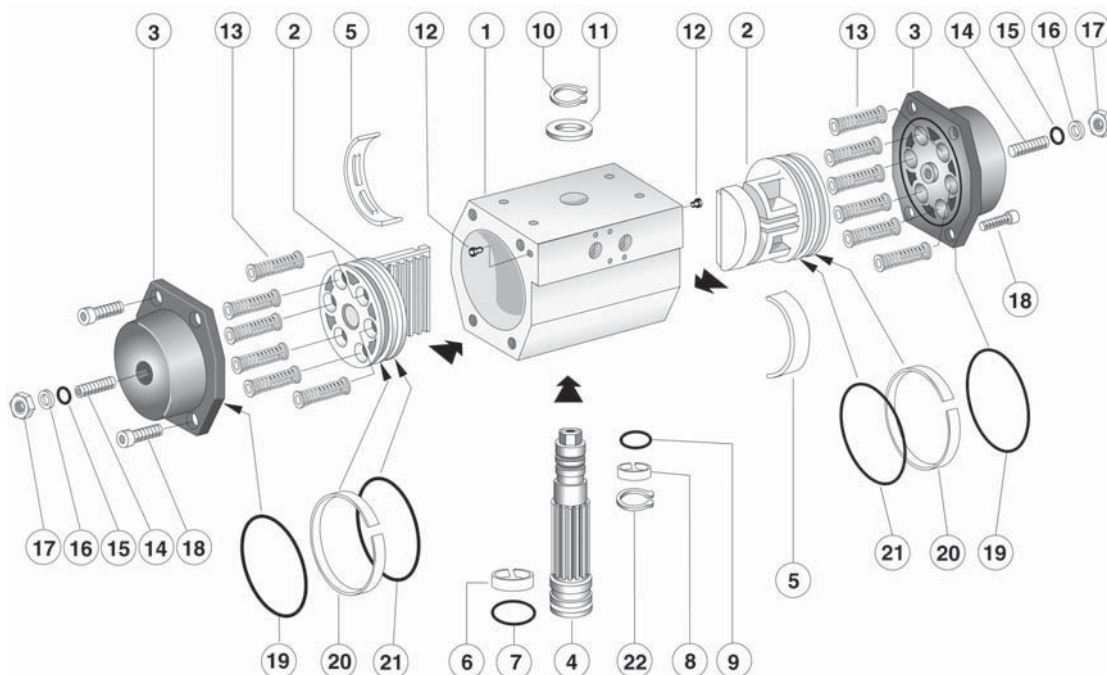
| Type | A | B | C | D | d | E | N | P | S | Z | U | V | CH | X | R | ISO 5211 | Gew. Kg. |
|---------------|-----|-----|-----|-----|----|----|------|----|----|--------|----|----|----|--------|----|------------|----------|
| ARS...1-25 | 142 | 67 | 60 | - | 80 | 30 | 1/8" | 10 | 12 | M5/M6 | 20 | 10 | 9 | 36/50 | 8 | F03/F05 | 1,15 |
| ARS...2-63 | 155 | 83 | 73 | - | 80 | 30 | 1/4" | 12 | 12 | M5/M6 | 20 | 10 | 11 | 42/50 | 8 | F04 od F05 | 1,6 |
| ARS...3-75 | 213 | 100 | 85 | - | 80 | 30 | 1/4" | 16 | 14 | M6/M8 | 20 | 10 | 14 | 50/70 | 10 | F05/F07 | 2,8 |
| ARS...3.5-85 | 236 | 110 | 98 | - | 80 | 30 | 1/4" | 20 | 19 | M8 | 20 | 13 | 17 | 70 | 14 | F07 | 4,3 |
| ARS...4-100 | 276 | 125 | 110 | - | 80 | 30 | 1/4" | 20 | 19 | M8/M10 | 20 | 13 | 17 | 70/102 | 14 | F07/F10 | 5,8 |
| ARS...4.5-115 | 310 | 142 | 128 | 130 | 80 | 30 | 1/4" | 24 | 28 | M10 | 30 | 20 | 22 | 102 | 20 | F10 | 8,3 |
| ARS...5-125 | 366 | 155 | 140 | 130 | 80 | 30 | 1/4" | 24 | 28 | M10 | 30 | 20 | 22 | 102 | 20 | F10 | 11,6 |
| ARS...5.5-140 | 388 | 176 | 160 | 130 | 80 | 30 | 1/4" | 29 | 36 | M12 | 30 | 20 | 27 | 125 | 28 | F12 | 14,2 |
| ARS...6-160 | 468 | 200 | 175 | 130 | 80 | 30 | 1/4" | 29 | 36 | M12 | 30 | 20 | 27 | 125 | 28 | F12 | 21,7 |
| ARS...8-200 | 563 | 250 | 215 | 130 | - | 30 | 1/4" | 38 | 48 | M16 | 50 | 20 | 36 | 140 | 32 | F14 | 40,1 |
| ARS...10-250 | 750 | 335 | 290 | 130 | - | 30 | 1/4" | 50 | 48 | M20 | 50 | 20 | 46 | 165 | 32 | F16 | 110 |

型号: ARSD / ARSE

| 单作用执行机构ARSE的输出扭矩[Nm] | | | | | | | | | | | | | | | |
|----------------------|--|--|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|------------------------------|--------|
| Typ / type | Federn pro Kolben / springs per piston | Steuerdruck [bar] / operating pressure [bar] | | | | | | | | | | | | Federkraft / spring - stroke | |
| | | 3 | | 4 | | 5 | | 6 | | 7 | | 8 | | | |
| | | 0° | 90° | 0° | 90° | 0° | 90° | 0° | 90° | 0° | 90° | 0° | 90° | 90° | 0° |
| ARSE-1-25 | S2 | 6,5 | 5,4 | 9,4 | 8,3 | 12,0 | 11,0 | 15,0 | 14,0 | 19,0 | 18,0 | 22,0 | 21,0 | 3,5 | 2,4 |
| | S3 | 5,3 | 3,7 | 8,2 | 6,6 | 11,0 | 9,6 | 14,0 | 13,0 | 18,0 | 17,0 | 21,0 | 20,0 | 5,2 | 3,6 |
| | S4 | 4,1 | 1,9 | 7,0 | 4,8 | 10,0 | 7,8 | 13,0 | 11,0 | 17,0 | 15,0 | 20,0 | 18,0 | 7,0 | 4,8 |
| | S5 | = | = | 3,1 | 2,7 | 8,8 | 6,1 | 12,0 | 9,0 | 16,0 | 13,0 | 19,0 | 16,0 | 8,7 | 6,0 |
| | S6 | = | = | = | = | 7,6 | 4,3 | 11,0 | 7,2 | 15,0 | 11,0 | 18,0 | 14,0 | 11,0 | 7,2 |
| ARSE-2-63 | S2 | 10,0 | 8,5 | 15,0 | 13,0 | 20,0 | 18,0 | 24,0 | 23,0 | 29,0 | 27,0 | 34,0 | 32,0 | 5,6 | 3,8 |
| | S3 | 8,4 | 5,7 | 13,0 | 10,0 | 18,0 | 15,0 | 23,0 | 20,0 | 27,0 | 25,0 | 32,0 | 29,0 | 8,4 | 5,7 |
| | S4 | = | = | 11,0 | 7,6 | 16,0 | 12,0 | 21,0 | 17,0 | 25,0 | 22,0 | 30,0 | 26,0 | 11,2 | 7,6 |
| | S5 | = | = | = | = | 14,0 | 9,5 | 19,0 | 14,0 | 23,0 | 19,0 | 28,0 | 24,0 | 14,0 | 9,5 |
| | S6 | = | = | = | = | 12,0 | 6,7 | 17,0 | 11,0 | 22,0 | 16,0 | 26,0 | 21,0 | 17,0 | 11,0 |
| ARSE-3-75 | S2 | 22,0 | 18,0 | 32,0 | 28,0 | 42,0 | 38,0 | 52,0 | 48,0 | 62,0 | 58,0 | 72,0 | 68,0 | 12,0 | 8,0 |
| | S3 | 18,0 | 12,0 | 28,0 | 22,0 | 38,0 | 32,0 | 48,0 | 42,0 | 58,0 | 52,0 | 68,0 | 62,0 | 18,0 | 12,0 |
| | S4 | = | = | 24,0 | 16,0 | 34,0 | 26,0 | 44,0 | 36,0 | 54,0 | 46,0 | 64,0 | 56,0 | 24,0 | 16,0 |
| | S5 | = | = | = | = | 30,0 | 20,0 | 40,0 | 30,0 | 50,0 | 40,0 | 60,0 | 50,0 | 30,0 | 20,0 |
| | S6 | = | = | = | = | 26,0 | 14,0 | 36,0 | 24,0 | 46,0 | 34,0 | 56,0 | 44,0 | 36,0 | 24,0 |
| ARSE-3.5-85 | S2 | 42,0 | 30,0 | 59,0 | 47,0 | 76,0 | 64,0 | 93,0 | 81,0 | 110,0 | 98,0 | 127,0 | 115,0 | 21,0 | 9,5 |
| | S3 | 32,0 | 20,0 | 49,0 | 37,0 | 66,0 | 54,0 | 83,0 | 71,0 | 100,0 | 88,0 | 117,0 | 105,0 | 31,0 | 19,0 |
| | S4 | = | = | 43,0 | 20,0 | 60,0 | 37,0 | 77,0 | 54,0 | 94,0 | 71,0 | 111,0 | 88,0 | 48,0 | 25,0 |
| | S5 | = | = | = | = | 53,0 | 33,0 | 70,0 | 50,0 | 87,0 | 67,0 | 104,0 | 84,0 | 52,0 | 32,0 |
| | S6 | = | = | = | = | 47,0 | 22,0 | 64,0 | 39,0 | 81,0 | 56,0 | 106,0 | 73,0 | 63,0 | 38,0 |
| ARSE-4-100 | S2 | 53,0 | 42,0 | 77,0 | 66,0 | 101,0 | 90,0 | 124,0 | 113,0 | 150,0 | 139,0 | 174,0 | 175,0 | 29,0 | 18,0 |
| | S3 | 43,0 | 28,0 | 67,0 | 52,0 | 91,0 | 76,0 | 114,0 | 99,0 | 140,0 | 125,0 | 164,0 | 154,0 | 43,0 | 28,0 |
| | S4 | = | = | 58,0 | 38,0 | 82,0 | 62,0 | 105,0 | 85,0 | 131,0 | 111,0 | 155,0 | 132,0 | 57,0 | 37,0 |
| | S5 | = | = | = | = | 73,0 | 47,0 | 96,0 | 70,0 | 122,0 | 96,0 | 146,0 | 110,0 | 72,0 | 46,0 |
| | S6 | = | = | = | = | 64,0 | 33,0 | 87,0 | 56,0 | 113,0 | 82,0 | 137,0 | 89,0 | 86,0 | 55,0 |
| ARSE-4.5-115 | S2 | 97,0 | 78,0 | 104,0 | 121,0 | 184,0 | 165,0 | 228,0 | 208,0 | 271,0 | 252,0 | 315,0 | 296,0 | 53,0 | 34,0 |
| | S3 | 80,0 | 51,0 | 123,0 | 95,0 | 167,0 | 138,0 | 211,0 | 182,0 | 254,0 | 225,0 | 298,0 | 269,0 | 80,0 | 51,0 |
| | S4 | 63,0 | 24,0 | 106,0 | 68,0 | 150,0 | 111,0 | 194,0 | 155,0 | 237,0 | 199,0 | 281,0 | 242,0 | 107,0 | 68,0 |
| | S5 | = | = | 89,0 | 41,0 | 133,0 | 85,0 | 177,0 | 128,0 | 220,0 | 172,0 | 264,0 | 216,0 | 133,0 | 85,0 |
| | S6 | = | = | 72,0 | 14,0 | 116,0 | 58,0 | 160,0 | 102,0 | 203,0 | 145,0 | 247,0 | 189,0 | 160,0 | 102,0 |
| ARSE-5-125 | S2 | 124,0 | 99,0 | 179,0 | 154,0 | 235,0 | 210,0 | 290,0 | 265,0 | 345,0 | 321,0 | 401,0 | 376,0 | 68,0 | 43,0 |
| | S3 | 103,0 | 66,0 | 158,0 | 121,0 | 214,0 | 177,0 | 269,0 | 232,0 | 325,0 | 288,0 | 380,0 | 343,0 | 101,0 | 64,0 |
| | S4 | = | = | 136,0 | 87,0 | 192,0 | 143,0 | 247,0 | 198,0 | 303,0 | 254,0 | 358,0 | 309,0 | 135,0 | 86,0 |
| | S5 | = | = | = | = | 170,0 | 109,0 | 225,0 | 164,0 | 281,0 | 220,0 | 336,0 | 275,0 | 169,0 | 108,0 |
| | S6 | = | = | = | = | 148,0 | 75,0 | 203,0 | 130,0 | 259,0 | 186,0 | 314,0 | 241,0 | 203,0 | 130,0 |
| ARSE-5.5-140 | S2 | 176,0 | 133,0 | 259,0 | 215,0 | 338,0 | 294,0 | 416,0 | 373,0 | 495,0 | 452,0 | 574,0 | 531,0 | 100,0 | 57,0 |
| | S3 | 148,0 | 83,0 | 230,0 | 165,0 | 309,0 | 244,0 | 388,0 | 323,0 | 467,0 | 402,0 | 546,0 | 481,0 | 150,0 | 85,0 |
| | S4 | 120,0 | 33,0 | 202,0 | 115,0 | 281,0 | 194,0 | 360,0 | 273,0 | 439,0 | 352,0 | 517,0 | 431,0 | 200,0 | 113,0 |
| | S5 | = | = | 174,0 | 65,0 | 253,0 | 144,0 | 331,0 | 223,0 | 410,0 | 302,0 | 489,0 | 381,0 | 250,0 | 142,0 |
| | S6 | = | = | 145,0 | 15,0 | 224,0 | 94,0 | 303,0 | 173,0 | 382,0 | 252,0 | 461,0 | 331,0 | 300,0 | 170,0 |
| ARSE-6-160 | S2 | 257,0 | 200,0 | 371,0 | 314,0 | 484,0 | 427,0 | 597,0 | 540,0 | 712,0 | 655,0 | 825,0 | 768,0 | 140,0 | 83,0 |
| | S3 | 215,0 | 130,0 | 329,0 | 244,0 | 442,0 | 357,0 | 555,0 | 470,0 | 670,0 | 585,0 | 783,0 | 698,0 | 210,0 | 125,0 |
| | S4 | = | = | 287,0 | 174,0 | 400,0 | 287,0 | 513,0 | 400,0 | 628,0 | 515,0 | 741,0 | 628,0 | 280,0 | 167,0 |
| | S5 | = | = | = | = | 358,0 | 217,0 | 471,0 | 330,0 | 586,0 | 445,0 | 699,0 | 558,0 | 350,0 | 209,0 |
| | S6 | = | = | = | = | 316,0 | 147,0 | 429,0 | 260,0 | 544,0 | 375,0 | 657,0 | 488,0 | 420,0 | 251,0 |
| ARSE-8-200 | S2 | 478,0 | 386,0 | 691,0 | 599,0 | 904,0 | 812,0 | 1120,0 | 1020,0 | 1330,0 | 1240,0 | 1700,0 | 1450,0 | 252,0 | 160,0 |
| | S3 | 398,0 | 260,0 | 611,0 | 473,0 | 824,0 | 686,0 | 1040,0 | 898,0 | 1250,0 | 1110,0 | 1460,0 | 1330,0 | 378,0 | 240,0 |
| | S4 | = | = | 531,0 | 347,0 | 744,0 | 560,0 | 956,0 | 772,0 | 1170,0 | 987,0 | 1380,0 | 1200,0 | 504,0 | 320,0 |
| | S5 | = | = | = | = | 664,0 | 434,0 | 876,0 | 646,0 | 1090,0 | 861,0 | 1300,0 | 1070,0 | 630,0 | 400,0 |
| | S6 | = | = | = | = | 584,0 | 308,0 | 796,0 | 520,0 | 1010,0 | 735,0 | 1220,0 | 948,0 | 756,0 | 480,0 |
| ARSE-10-250 | S2 | 1181,0 | 957,0 | 1720,0 | 1496,0 | 2259,0 | 2035,0 | 2798,0 | 2574,0 | 3337,0 | 3113,0 | 3876,0 | 3652,0 | 660,0 | 436,0 |
| | S3 | 963,0 | 628,0 | 1502,0 | 1167,0 | 2041,0 | 1706,0 | 2580,0 | 2245,0 | 3119,0 | 2784,0 | 3658,0 | 3323,0 | 989,0 | 654,0 |
| | S4 | = | = | 1284,0 | 837,0 | 1823,0 | 1376,0 | 2362,0 | 1915,0 | 2901,0 | 2454,0 | 3440,0 | 2993,0 | 1319,0 | 872,0 |
| | S5 | = | = | = | = | 1605,0 | 1046,0 | 2144,0 | 1585,0 | 2683,0 | 2124,0 | 3222,0 | 2663,0 | 1649,0 | 1090,0 |
| | S6 | = | = | = | = | = | = | 1909,0 | 1254,0 | 2448,0 | 1793,0 | 2987,0 | 2332,0 | 1980,0 | 1325,0 |

| 双作用执行机构ARSD的输出扭矩[Nm] | | | | | | | |
|----------------------|--|--------|--------|--------|--------|--------|--------|
| Typ / type | Steuerdruck [bar] / operating pressure [bar] | | | | | | |
| | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| ARSD-1-25 | 5,9 | 8,9 | 12,0 | 15,0 | 18,0 | 22,0 | 25,0 |
| ARSD-2-63 | 9,4 | 14,0 | 19,0 | 24,0 | 28,0 | 33,0 | 38,0 |
| ARSD-3-75 | 20,0 | 30,0 | 40,0 | 50,0 | 60,0 | 70,0 | 80,0 |
| ARSD-3.5-85 | 34,0 | 51,0 | 68,0 | 85,0 | 102,0 | 119,0 | 136,0 |
| ARSD-4-100 | 48,0 | 71,0 | 95,0 | 119,0 | 142,0 | 168,0 | 192,0 |
| ARSD-4.5-115 | 87,0 | 131,0 | 174,0 | 218,0 | 262,0 | 305,0 | 349,0 |
| ARSD-5-125 | 111,0 | 167,0 | 222,0 | 278,0 | 333,0 | 389,0 | 444,0 |
| ARSD-5.5-140 | 158,0 | 236,0 | 315,0 | 394,0 | 473,0 | 552,0 | 631,0 |
| ARSD-6-160 | 227,0 | 340,0 | 454,0 | 567,0 | 680,0 | 795,0 | 908,0 |
| ARSD-8-200 | 426,0 | 638,0 | 851,0 | 1060,0 | 1280,0 | 1490,0 | 1700,0 |
| ARSD-10-250 | 1078,0 | 1617,0 | 2156,0 | 2695,0 | 3234,0 | 3773,0 | 4312,0 |

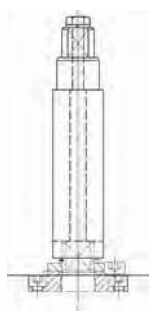
型号: ARSD / ARSE



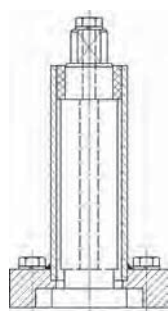
| | | | | | |
|-------------|--------------------------|---------------|----------------|----------------------|----------------------|
| 22 | Sicherungsring | spring clip | 1 | VA | stainless steel |
| ▶ 21 | O-Ring | o-ring | 2 | Buna-N | Buna-N |
| ▶ 20 | Kolbenband | piston guide | 2 | Acetal Resin | Acetal Resin |
| ▶ 19 | O-Ring | o-ring | 2 | Buna-N | Buna-N |
| 18 | Schraube | screw | 8 | VA | stainless steel |
| 17 | Mutter | nut | 2 | VA | stainless steel |
| 16 | Scheibe | plain washer | 2 | VA | stainless steel |
| 15 | O-Ring | o-ring | 2 | Buna-N | Buna-N |
| 14 | Schraube | screw | 2 | VA | stainless steel |
| 13 | Federn* | springs* | 4-12 | Stahl behandelt | carbon steel treated |
| ▶ 12 | Stopfen | plug | 2 | Gummi | rubber |
| 11 | Gleitring | thrust washer | 1 | Acetal Resin | Acetal Resin |
| 10 | Sicherungsring | spring clip | 1 | VA | stainless steel |
| ▶ 9 | O-Ring | o-ring | 1 | Buna-N | Buna-N |
| ▶ 8 | Gleitring | pinion guide | 1 | Acetal Resin | Acetal Resin |
| ▶ 7 | O -Ring | o-ring | 1 | Buna-N | Buna-N |
| ▶ 6 | Gleitring | pinion guide | 1 | Acetal Resin | Acetal Resin |
| ▶ 5 | Gleitelement | piston guide | 2 | Acetal Resin | Acetal Resin |
| 4 | Ritzel | pinion | 1 | Stahl behandelt | carbon steel treated |
| 3 | Deckel | end cap | 2 | Aluminium-Legierung | aluminium alloy |
| 2 | Kolben | piston | 2 | Aluminium-Legierung | aluminium alloy |
| 1 | Gehäuse | body | 1 | Aluminium-Legierung | aluminium alloy |
| Pos. / item | Benennung / denomination | | Stück / pieces | Werkstoff / material | |

* 型号 ARSE 预装弹簧

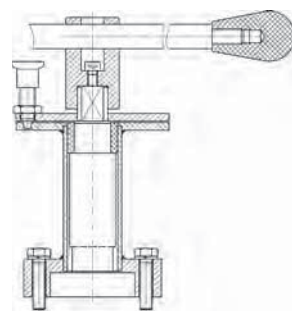
| 型号选择 | | | | | Wartung / maintenance |
|------|------|-----|-------|------|-------------------------------------|
| ARS | D - | 4 - | 100 | | 执行机构正常动作，保养时通常不须要备件，我们建议备件仅作为维修时使用。 |
| 型号 | 双作用 | 系列号 | 活塞直径 | | |
| ARS | E - | 5 - | 125 - | S4 | |
| 型号 | 弹簧复位 | 系列号 | 活塞直径 | 弹簧数量 | |
| | | | | | |



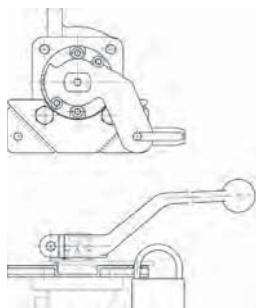
标准加长阀杆



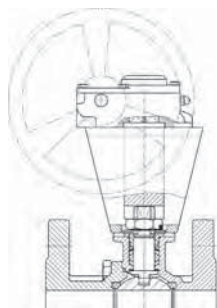
带加强管的加长阀杆



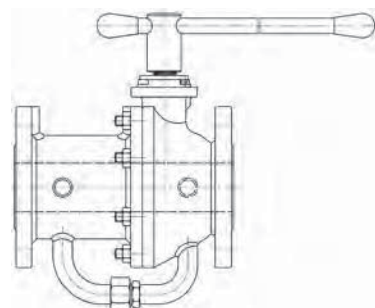
带组合装置，特殊手柄和加强管的加长阀杆



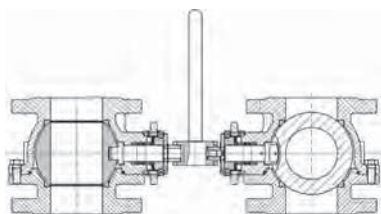
锁定装置



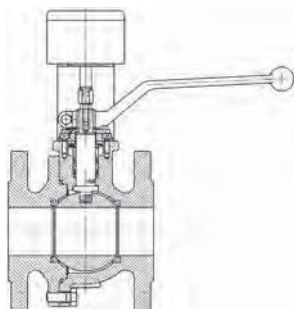
齿轮箱



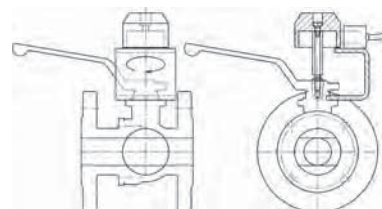
加热夹套和特殊手柄



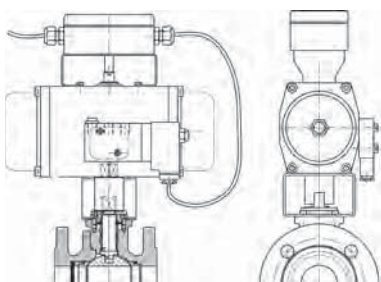
带联动齿轮箱



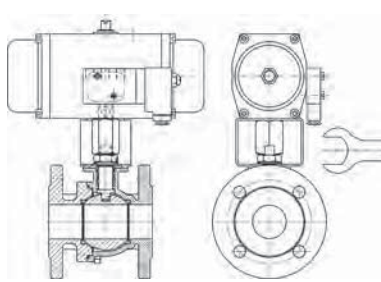
带限位开关盒



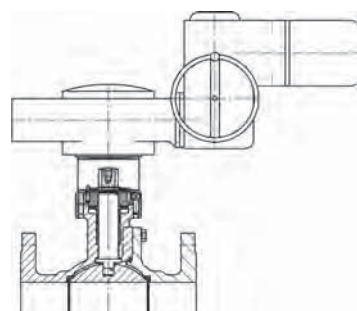
带双感应式传感器



带气动头，限位开关，电磁阀



带气动头，电磁阀及快速手动操作器



带电动头和手动紧急操作手轮

选购件1 阀位传感器

A)电感式传感器 (P+F)

例如: 型号SJ3.5N with LED

额定电压: 8V DC

工作温度: -25°C至+100°C

防护等级: IP65(盒); IP67(开关)

防爆型式: EEx ia II CT6(本安)

电线入口: Pg13.5

连接方式: 2线制; 符合NAMUR

B)微动式开关 (Crouzet)

例如: 型号83 139 1

最大电压/电流: 250V/6A

常用电压/电流: 230V AC/5A; 24V DC/2A

工作温度: -20°C至+85°C

防护等级: IP65(盒); IP67(开关)

防爆型式: EEx d II CT6 (隔爆)

电线入口: Pg13.5

连接方式: 3线制

C)机电式开关 (A+R或Stente)

例如: 型号 EEx 95

最大电压/电流: 500V/10A

常用电压/电流: 230V AC/4A; 24V DC/1A

工作温度: -20°C至+65°C

防护等级: IP67

防爆型式: EEx d II CT6 (隔爆)

电线入口: Pg13.5

连接方式: 2线制; 符合NAMUR

选购件2 电磁阀

标准产品 (A+R或海隆)

带有手动应急操作

功能: 二位三通或二位五通

电磁头: 单电控或双电控

气源入口: G 1/4"

防护等级: IP65

电压/功率: 24VDC/3W; 230VAC/5VA

防爆型式: EEx d II CT4; EEx d II CT5/T6 (隔爆)

工作压力: 1-10 bar

环境温度: -25°C至+80°C

壳体材料: Anodized Al. 经阳极氧化的铝合金

选购件3 带过滤器的减压阀

特点: 输出压力稳定

压力标定简易

防腐结构; 耐用; 大流量