

# Gaszugfedern · Gas traction springs

Ressorts à gaz de traction · Molle a gas di trazione

Resortes a gas tracción



## D

- **Hohe Korrosionsbeständigkeit**
  - Gehäuse: pulverbeschichtet
  - Kolbenstange: keramisch beschichtet
- **Minimale Reibungswerte für niedrigste Ausschubkräfte**
- **Integrierte Fettkammer und Gleitlager**
  - Niedrige Losbrechkraft
  - Einbaulage: beliebig
  - Wartungsfrei und einbaufertig
  - Temperaturbereich: -30°C – +80°C, optional: -45°C – +200°C
  - RoHS konform Richtlinie 2002/95/EG
  - Einzugkraft muss bei Bestellung angegeben werden

## GB

- **High corrosion resistance**
  - Housing: powder coated
  - Piston rod: ceramic coated
- **Minimal friction coefficient to achieve the lowest extension forces**
- **Integrated grease chamber and sliding bearing**
  - Lower breakaway force
  - Installation position: any
  - Maintenance-free and ready for installation
  - Temperature: -30°C – +80°C, optional: -45°C – +200°C
  - RoHS compliant Directive 2002/95/EC
  - Pull-in force must be stated on ordering.

## F

- **Résistance élevée à la corrosion**
  - Corps : peinture à la poudre
  - Tige de piston: revêtement céramique
- **Valeurs de frottement minimales pour atteindre les plus faibles forces d'extension**
- **Chambre de lubrification et palier lisse intégrés**
  - Faible force de rupture
  - Position de montage : au choix
  - Sans maintenance et prêt à monter
  - Températures: -30°C – +80°C, en option: -45°C – +200°C
  - RoHS compliant Directive 2002/95/EC
  - L'effort d'amortissement doit être précisé lors de la commande

## I

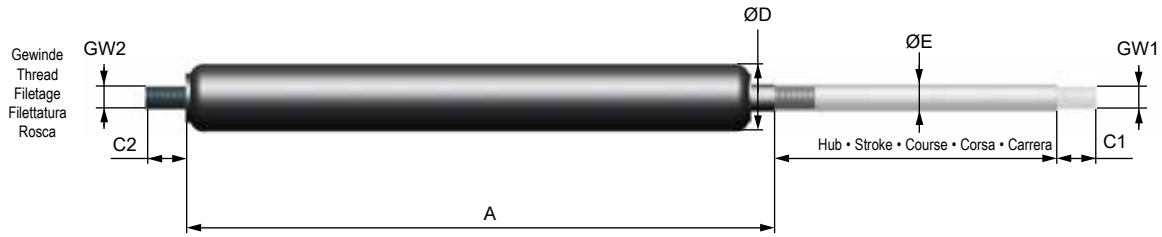
- **Elevata resistenza alla corrosione**
  - Corpo: rivestimento in polvere
  - Stelo del pistone: rivestimento ceramico
- **Valori d'attrito ridotti per ottenere forze d'espulsione minime**
- **Camera di lubrificazione e cuscinetti a strisciamento integrati**
  - Forza di spunto ridotta
  - Posizione di montaggio: a scelta
  - Senza manutenzione e pronte per il montaggio
  - Temperatura: -20°C - +80°C, opzionale: -45°C - +200°C
  - RoHS compliant Direttiva 2002/95/EC
  - La forza di inserimento deve essere indicata quando si effettua l'ordine

## E

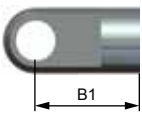
- **Alta resistencia a la corrosión**
  - Carcasa: recubrimiento en polvo
  - Vástago del émbolo: revestimiento cerámico
- **Valores de fricción mínimos para conseguir las menores fuerzas de extracción**
- **Cámara de grasa y cojinetes deslizantes integrados**
  - Fuerza de arranque baja
  - Posición de montaje: cualquiera
  - Sin mantenimiento y listo para ser montado
  - Temperaturas: -30°C – +80°C, opcional: -45°C – +200°C
  - RoHS y que cumplan Directiva 2002/95/CE
  - Debe indicarse la fuerza de inserción en el pedido

**G0**

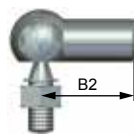
**K0**



**1** Gelenkauge • Male rod clevis  
Tête de chape (male)  
Attacco a cerniera maschio  
Charnela macho



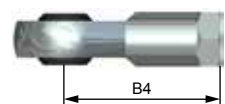
**2** Winkelgelenk • Angle joint  
Joint à angle • Snodo angolare  
Charnela articulada



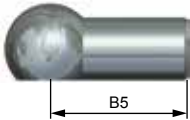
**3** Gabelkopf • Female rod clevis  
Embout à rotule (femelle)  
Forcella femmina  
Charnela hembra



**4** Gelenkkopf • Spherical end bearing  
Joint articulé • Forcella snodata  
Charnela macho articulada



**5** Kugelpfanne • Ball joint housing  
Cousinet sphérique  
Cuscinetto sferico  
Cojinete esférico



**6** nur G  
only G  
Ablafschraube • Release screw  
Vis de purge • Tappo di scarico  
Tornillo de vaciado



**8** Schutzrohr • Protection tube  
Tube de protection  
Tubo di protezione  
Tubo de protección



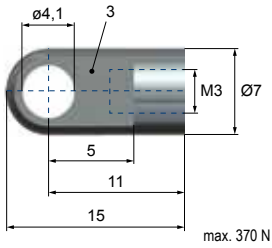
## ABMESSUNGEN - DIMENSIONS - DIMENSIONI - DIMENSIONES

	Ø D	Hub • Stroke Course • Corsa Carrera	Kraft • Force Force • Forza Fuerza		Kraft bei ausgezogener Kolbenstange Force with extended piston rod*	A	B1	B2	B3	B4	B5	B6	C1	C2	Ø E	GW1	GW2
	mm	mm	N min.	N max.	N max.	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
WM-GZ-19-30	19	30	30	300	360	112	20	30	32	36	30	5	10	8	6	M8	M8
WM-GZ-19-50	19	50	30	300	360	132	20	30	32	36	30	5	10	8	6	M8	M8
WM-GZ-19-100	19	100	30	300	360	182	20	30	32	36	30	5	10	8	6	M8	M8
WM-GZ-19-150	19	150	30	300	360	232	20	30	32	36	30	5	10	8	6	M8	M8
WM-GZ-19-200	19	200	30	300	360	282	20	30	32	36	30	5	10	8	6	M8	M8
WM-GZ-28-30	28	30	150	1200	1980	130	25	35	40	43	35	12	9	9	10	M10	M10
WM-GZ-28-50	28	50	150	1200	1980	150	25	35	40	43	35	12	9	9	10	M10	M10
WM-GZ-28-100	28	100	150	1200	1980	200	25	35	40	43	35	12	9	9	10	M10	M10
WM-GZ-28-150	28	150	150	1200	1980	250	25	35	40	43	35	12	9	9	10	M10	M10
WM-GZ-28-200	28	200	150	1200	1980	300	25	35	40	43	35	12	9	9	10	M10	M10
WM-GZ-28-250	28	250	150	1200	1980	350	25	35	40	43	35	12	9	9	10	M10	M10
WM-GZ-28-300	28	300	150	1200	1980	400	25	35	40	43	35	12	9	9	10	M10	M10
WM-GZ-28-350	28	350	150	1200	1980	450	25	35	40	43	35	12	9	9	10	M10	M10
WM-GZ-28-400	28	400	150	1200	1980	500	25	35	40	43	35	12	9	9	10	M10	M10
WM-GZ-28-450	28	450	150	1200	1980	550	25	35	40	43	35	12	9	9	10	M10	M10
WM-GZ-28-500	28	500	150	1200	1980	600	25	35	40	43	35	12	9	9	10	M10	M10
WM-GZ-28-550	28	550	150	1200	1980	650	25	35	40	43	35	12	9	9	10	M10	M10
WM-GZ-28-600	28	600	150	1200	1980	700	25	35	40	43	35	12	9	9	10	M10	M10
WM-GZ-28-650	28	650	150	1200	1980	750	25	35	40	43	35	12	9	9	10	M10	M10

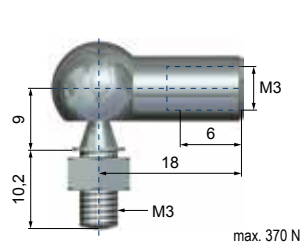
\* Force avec tige de piston sortie • Forza con stelo del pistone estratta • Fuerza con vástago del émbolo extendida

M3

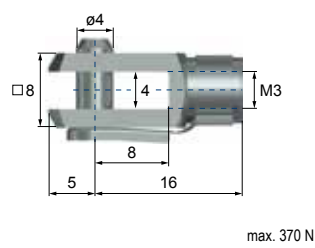
1-M3 Gelenkauge • Male rod clevis  
Tête de chape (male)  
Attacco a cerniera maschio  
Charnela macho



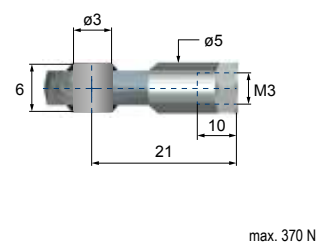
2-M3 Winkelgelenk • Angle joint  
Joint à angle • Snodo angolare  
Charnela articulada



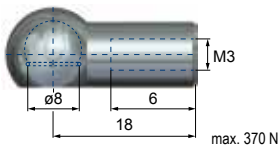
3-M3 Gabelkopf • Female rod clevis  
Embout à rotule (femelle)  
Forcella femmina  
Charnela hembra



4-M3 Gelenkkopf  
Spherical end bearing  
Joint articulé • Forcella snodata  
Charnela macho articulada

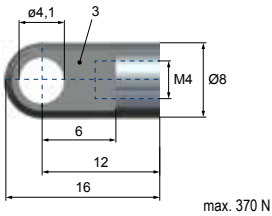


5-M3 Kugelpfanne • Ball joint housing  
Cousinet sphérique  
Cuscinetto sferico  
Cojinete esférico

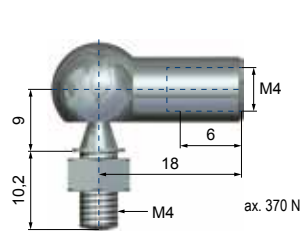


M4

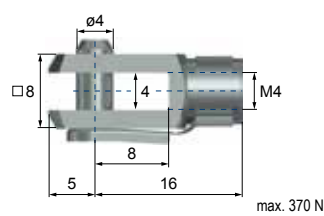
1-M4 Gelenkauge • Male rod clevis  
Tête de chape (male)  
Attacco a cerniera maschio  
Charnela macho



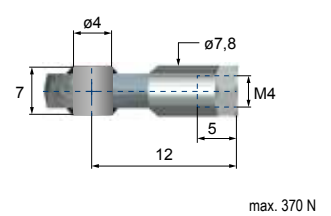
2-M4 Winkelgelenk • Angle joint  
Joint à angle • Snodo angolare  
Charnela articulada



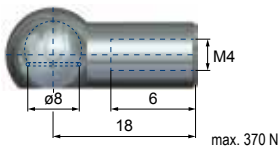
3-M4 Gabelkopf • Female rod clevis  
Embout à rotule (femelle)  
Forcella femmina  
Charnela hembra



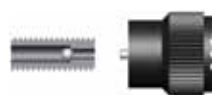
4-M4 Gelenkkopf  
Spherical end bearing  
Joint articulé • Forcella snodata  
Charnela macho articulada



5-M4 Kugelpfanne • Ball joint housing  
Cousinet sphérique  
Cuscinetto sferico  
Cojinete esférico

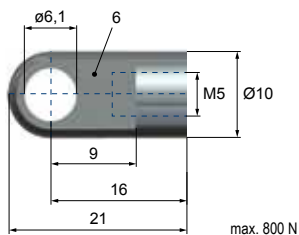


6-M4 Ablasschraube • Release screw  
Vis de purge • Tappo di scarico  
Tornillo de vaciado

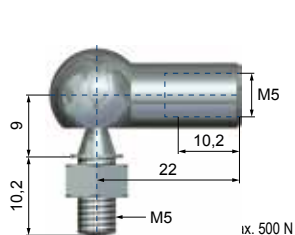


M5

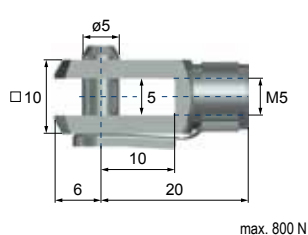
1-M5 Gelenkauge • Male rod clevis  
Tête de chape (male)  
Attacco a cerniera maschio  
Charnela macho



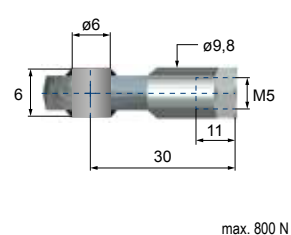
2-M5 Winkelgelenk • Angle joint  
Joint à angle • Snodo angolare  
Charnela articulada



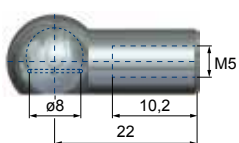
3-M5 Gabelkopf • Female rod clevis  
Embout à rotule (femelle)  
Forcella femmina  
Charnela hembra



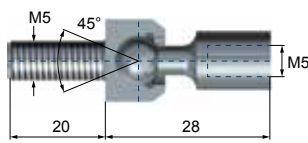
4-M5 Gelenkkopf  
Spherical end bearing  
Joint articulé • Forcella snodata  
Charnela macho articulada



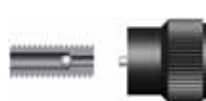
5-M5 Kugelpfanne • Ball joint housing  
Cousinet sphérique  
Cuscinetto sferico  
Cojinete esférico



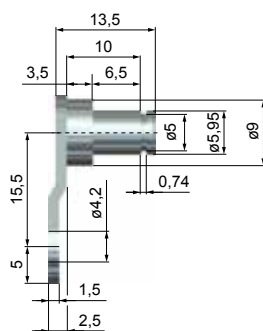
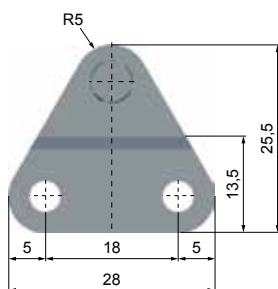
7-M5 Gelenkschraube • Ball joints  
Inline rotule • Snodo Sferico Assiale  
Línea de rótulas



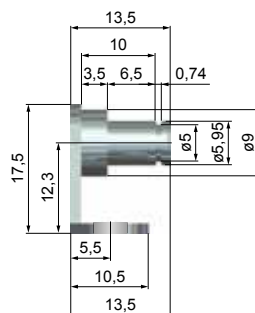
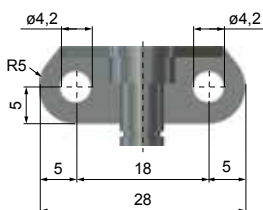
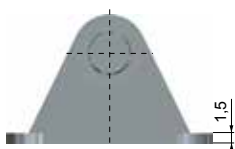
6-15-M5 Ablasschraube • Release screw  
Vis de purge • Tappo di scarico  
Tornillo de vaciado



26 (für / for 1-M5, 4-M5)

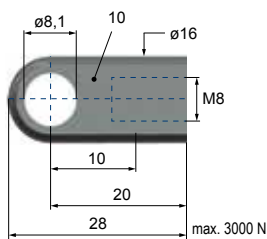


29 (für / for 1-M5, 4-M5)

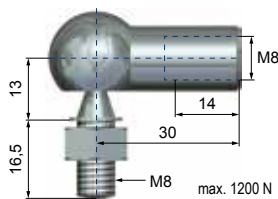


M8

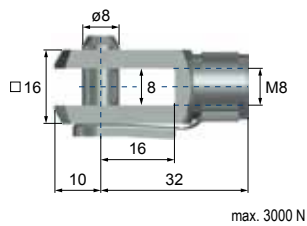
1-M8 Gelenkauge • Male rod clevis  
Tête de chape (male)  
Attacco a cerniera maschio  
Charnela macho



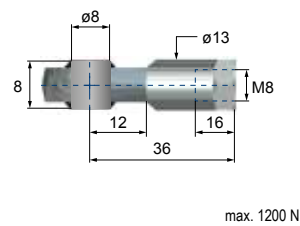
2-M8 Winkelgelenk • Angle joint  
Joint à angle • Snodo angolare  
Charnela articulada



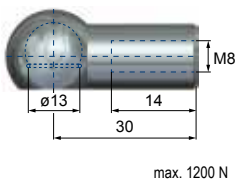
3-M8 Gabelkopf • Female rod clevis  
Embout à rotule (femelle)  
Forcella femmina  
Charnela hembra



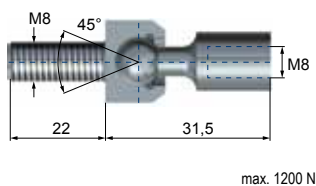
4-M8 Gelenkkopf  
Spherical end bearing  
Joint articulé • Forcella snodata  
Charnela macho articulada



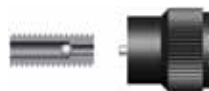
5-M8 Kugelpfanne • Ball joint housing  
Cousinet sphérique  
Cuscinetto sferico  
Cojinete esférico



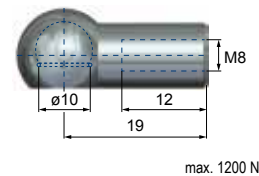
7-M8 Gelensschraube • Ball joints  
Inline rotule • Snodo Sferico Assiale  
Línea de rótulas



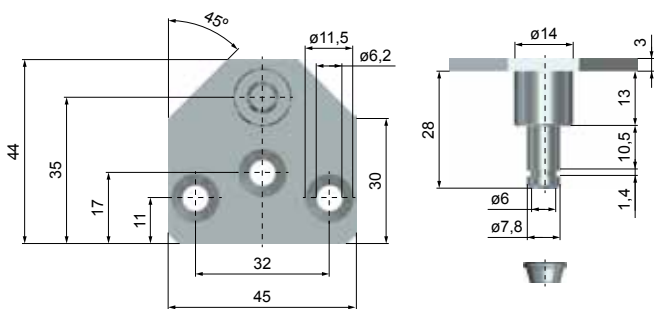
6-22-M8 Ablassschraube • Release screw  
Vis de purge • Tappo di scarico  
Tornillo de vaciado



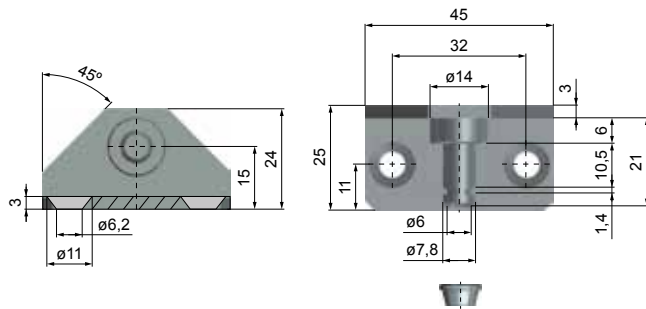
5-2-M8 Kugelpfanne  
Ball joint housing  
Cousinet sphérique  
Cuscinetto sferico  
Cojinete esférico



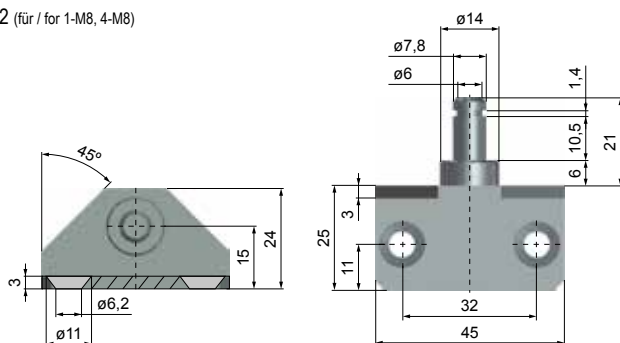
20 (für / for 1-M8, 4-M8)



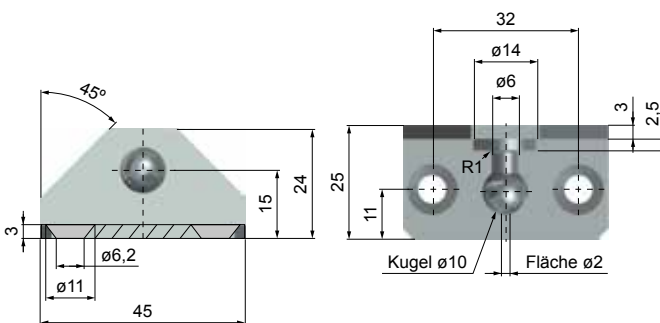
21 (für / for 1-M8, 4-M8)



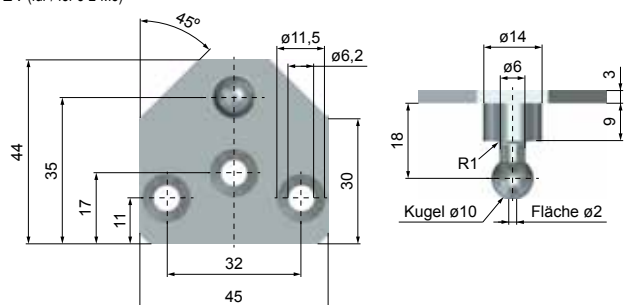
22 (für / for 1-M8, 4-M8)



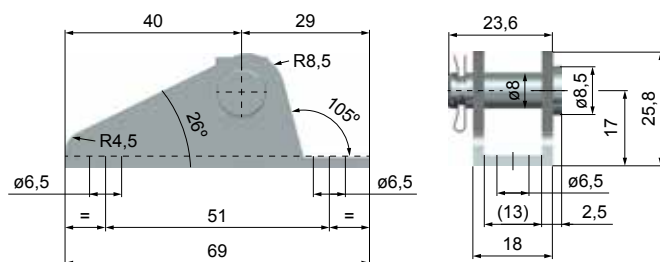
23 (für / for 5-2-M8)



24 (für / for 5-2-M8)

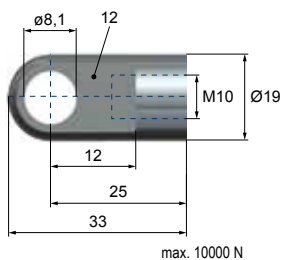


25 (für / for 1-M8, 4-M8)

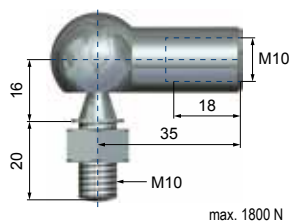


M10

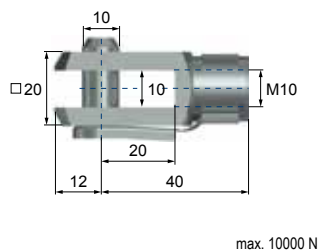
1-M10 Gelenkauge • Male rod clevis  
Tête de chape (male)  
Attacco a cerniera maschio  
Charnela macho



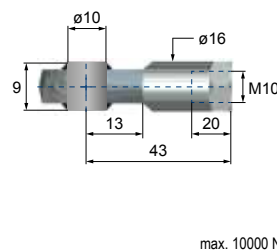
2-M10 Winkelgelenk • Angle joint  
Joint à angle • Snodo angolare  
Charnela articulada



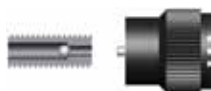
3-M10 Gabelkopf • Female rod clevis  
Embout à rotule (femelle)  
Forcella femmina  
Charnela hembra



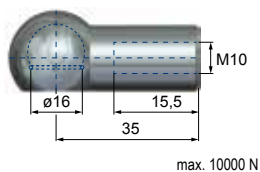
4-M10 Gelenkkopf  
Spherical end bearing  
Joint articulé • Forcella snodata  
Charnela macho articulada



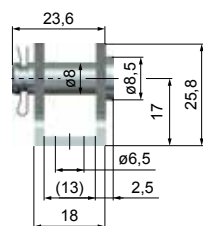
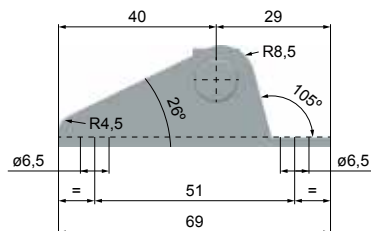
6-28-M10 Ablaßschraube • Release screw  
Vis de purge • Tappo di scarico  
Tornillo de vaciado



5-M10 Kugelpfanne • Ball joint housing  
Cousinet sphérique  
Cuscinetto sferico  
Cojinete esférico

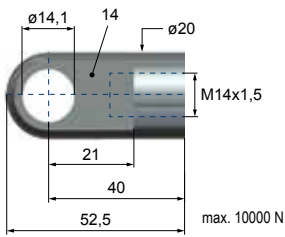


25 (für / for 1-M10)

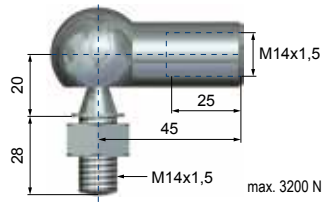


M14x1,5

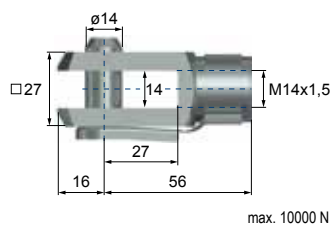
1-M14 Gelenkauge • Male rod clevis  
Tête de chape (male)  
Attacco a cerniera maschio  
Charnela macho



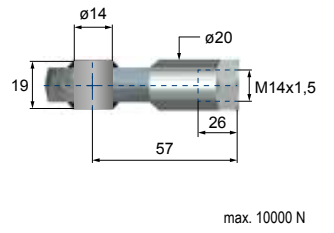
2-M14 Winkelgelenk • Angle joint  
Joint à angle • Snodo angolare  
Charnela articulada



3-M14 Gabelkopf • Female rod clevis  
Embout à rotule (femelle)  
Forcella femmina  
Charnela hembra



4-M14 Gelenkkopf  
Spherical end bearing  
Joint articulé • Forcella snodata  
Charnela macho articulada

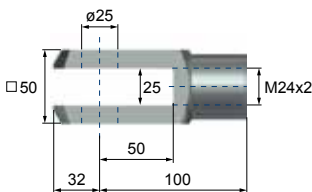


6-40-M14 Ablassschraube • Release screw  
Vis de purge • Tappo di scarico  
Tornillo de vaciado

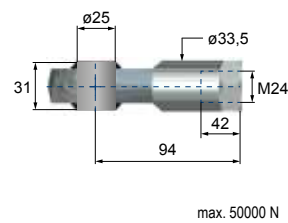


M24x2

3-M24 Gabelkopf • Female rod clevis  
Embout à rotule (femelle)  
Forcella femmina  
Charnela hembra



4-M24 Gelenkkopf  
Spherical end bearing  
Joint articulé • Forcella snodata  
Charnela macho articulada



### Gasfeder-Füllkoffer - Gas spring Refilling Kit



Gasfeder-Füllkoffer zum füllen und anpassen von Gasfedern vor Ort. Der Koffer enthält alle Füllglocken und Ablaßschrauben. Der Füllkoffer ist passend für 200 bar Stickstoff-Flaschen mit Gewinde W24,32x1/14". Stickstoff ist im Lieferumfang nicht enthalten.

The gas spring refilling kit allows to fill or adjust gas springs on site. The kit contains all necessary filling bells and release screws for our product range. The refilling kit is equipped for 200 bar nitrogen bottles with thread W24,32x1/14". Nitrogen is not included.

### Gasfeder-Ablasskoffer - Gas Spring Release Kit



Gasfeder-Ablasskoffer zum kontrollierten Ablassen von Stickstoff bei Gasfedern. Der Koffer enthält alle notwendigen Ablaß-Schrauben und einen Manometer zum Prüfen des verbleibenden Drucks in der Gasfeder.

Gas spring release kit for controlled discharge of nitrogen in gas springs. The kit contains all necessary release screws and a pressure gauge to control the remaining pressure in the gas spring.

### Gasfeder Füllstand - Gas Spring Filling Station



Gasfeder Füllstand zum Füllen von Gasfedern (außer WM-G-70). Der Füllstand wird inklusiver aller Fülladapter geliefert. Stickstoff ist im Lieferumfang nicht enthalten.

Gas spring filling station to fill gas springs (except WM-G-70). All necessary filling adapters are included. Nitrogen is not included.