

# CRASH PROTECTION SERIES CSR

## ▶ PRODUCT ADVANTAGES



### ▶ Adjustable triggering sensitivity

By controlling the air pressure, you can optimally match the sensitivity to your application

### ▶ Integrated sensors

If there is a collision, the integrated sensor gives a signal to the control system to trigger an emergency stop.

### ▶ More safety due to manual return

We forgo an automatic return and ensure that the operator inspects the machine and the reason for the emergency stop

## ▶ THE BEST PRODUCT FOR YOUR APPLICATION



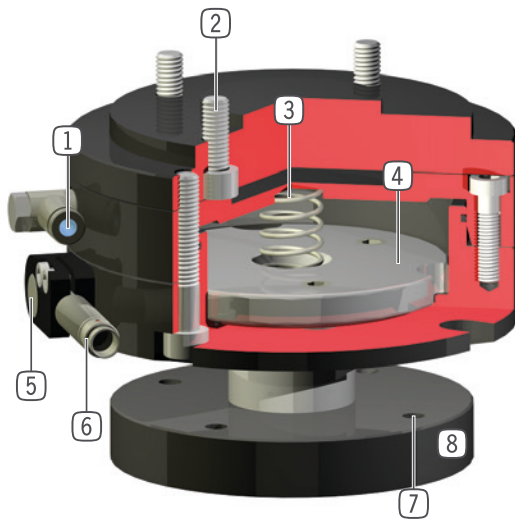
### ▶ Our products welcome the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you endless possibilities.

Find the best product for your specific use:

[www.zimmer-group.com](http://www.zimmer-group.com)

## ► BENEFITS IN DETAIL



- ① **Energy supply**
- ② **Robot connecting flange**
  - partial mounting circle in accordance with EN ISO 9409-1
- ③ **Drive**
  - single-acting pneumatic cylinder
  - response sensitivity adjustable via operating pressure
  - with integrated spring
- ④ **Force transfer**
  - direct and low-loss at piston surface
- ⑤ **Pressure differential switch**
  - indirect overload recognition
- ⑥ **Sensors**
  - inductive proximity switch generates a signal which can be used to recognise an overload situation
  - generates an automatic emergency off system situation
  - included in the delivery inductive proximity switch  $\varnothing$  8 mm with cable connection M8x1
- ⑦ **Connecting flange**
- ⑧ **Overload recognition and compensation**
  - in Z-direction up to 28 mm stroke
  - angular deflection up to 12.5°
  - on rotation around the Z-axis 360°

## ► FURTHER INFORMATION IS AVAILABLE ONLINE



### ► Technical Information

All information just a click away at: [www.zimmer-group.com](http://www.zimmer-group.com)

Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product.

Quick, clear and always up-to-date.



# CRASH PROTECTION

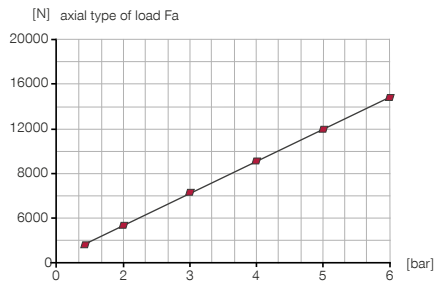
## INSTALLATION SIZE CSR160

### ▶ PRODUCT SPECIFICATIONS



#### ▶ Air pressurization

shows force and moments vs pressure

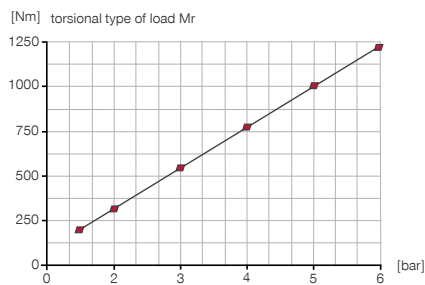


#### ▶ Forces and moments

See diagram for max. forces and torques

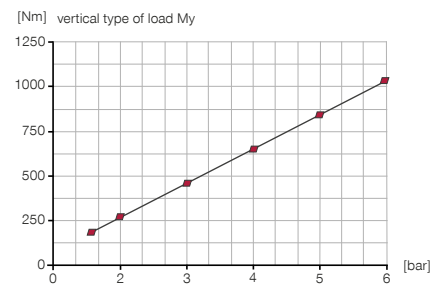
#### ▶ Air pressurization

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### ▶ INCLUDED IN DELIVERY



Inductive proximity switch  
- Connector M8  
**NJ8-E2S-05**

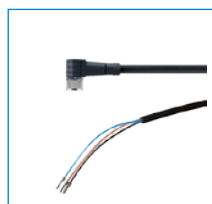


Cylinder Screw  
**C0912100309**

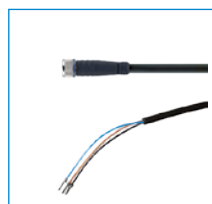
### ▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick  
Connect Style  
**GV1-8X8**



Plug-in connector Angled  
Cable 5m - Socket M8  
(female)  
**KAW500**

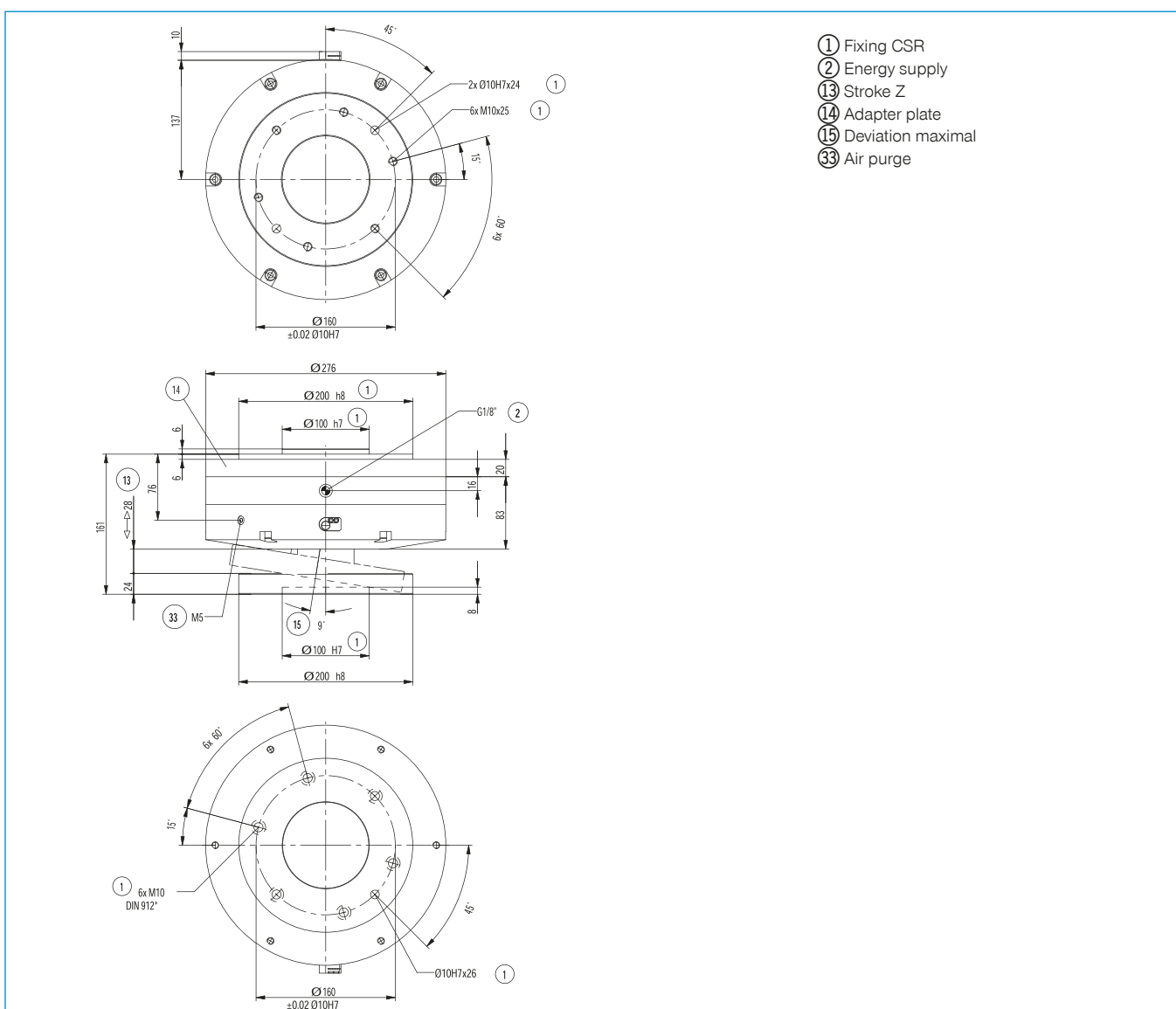


Plug-in connector Straight  
Cable 5m - Socket M8  
(female)  
**KAG500**

Order no.	Technical Data*
Connecting flange according EN ISO 9409-1	TK 160
Installation Height [mm]	161
Recommended handling weight [kg]**	150
Z-axis deviation [mm]	28
Repetition accuracy Axial +/- [mm]	0.05
Horizontal deviation +/- [°]	9
Repetition accuracy Radial +/- [mm]	0.05
Operating pressure min. [bar]	1
Operating pressure max. [bar]	6
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Weight [kg]	15.2

\* All data measured at 6 bar

\*\*with central attachment



- ① Fixing CSR
- ② Energy supply
- ⑬ Stroke Z
- ⑭ Adapter plate
- ⑮ Deviation maximal
- ⑳ Air purge