

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



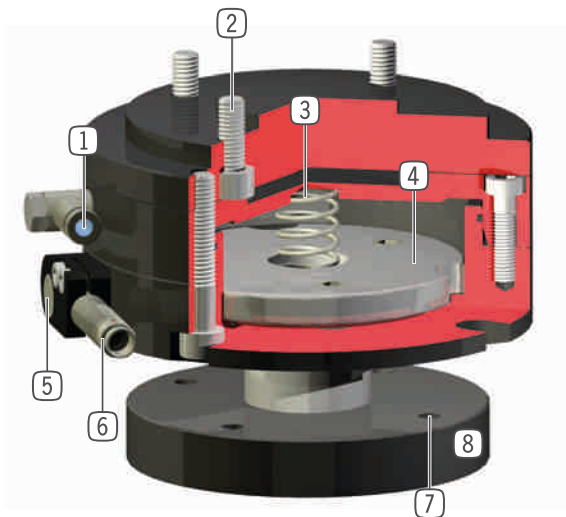
▶ Our products welcome the challenge!

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

► 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

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

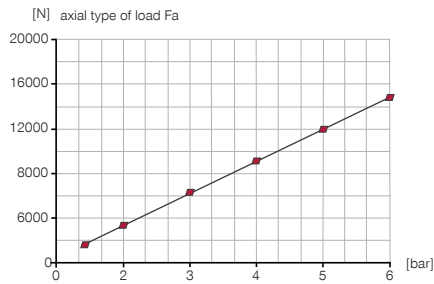
INSTALLATION SIZE CSR160

▶ PRODUCT SPECIFICATIONS



▶ Air pressurization

shows force and moments vs pressure

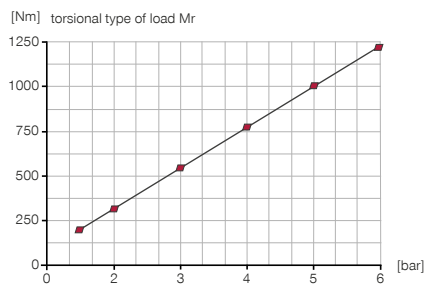


▶ Forces and moments

See diagram for max. forces and torques

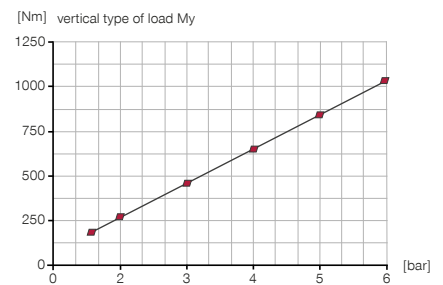
▶ Air pressurization

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▶ 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

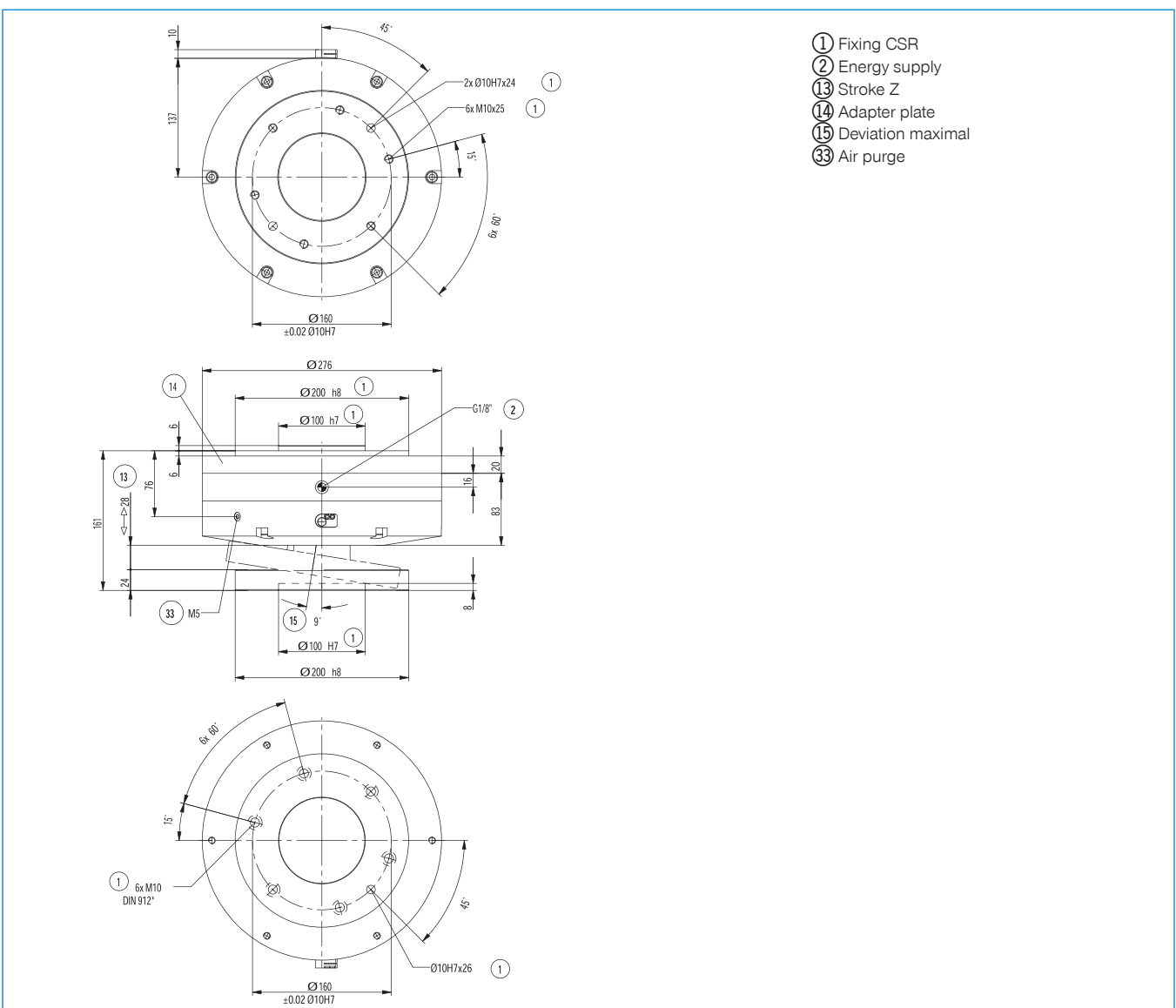


Plug-in connector Straight
Cable 5m - Socket M8
(female)
KAG500

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