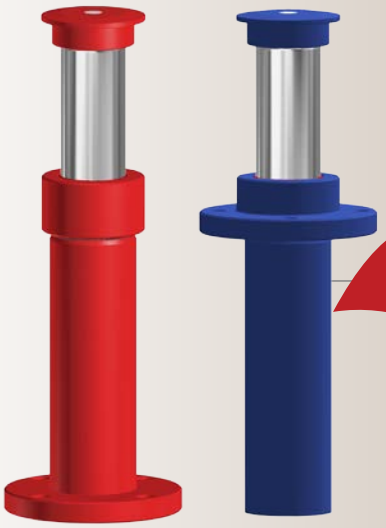


NEW

Industrial Brakes

Stromag PHS

Hydraulic Buffers

The hydraulic buffers of the PHS series have been designed to be used for many different technical applications.

The buffer can be used for any kind of technical application due to its self-contained system. Since there is no need for this damping device to be supplied with external energy or other external means, it is outstandingly suited to decelerate moving masses along the shortest possible path considering the company requirements.

Applications

- Steel Industry
- Port Applications
- Nuclear Cranes

Benefits

- Diameter range of 75 mm up to 175 mm
- Buffer stroke of 50mm up to 1600 mm
- Max. buffer power of up to 1000 kN
- Operating temperature of -30 up to 100°C
- Wear-resistant piston rod by means of hard-chrome plating
- Optional mounted piston rod protection
- Optimal throttle features designed for the specific requirements of the different application
- Paints according to customer requirement

Stromag®
Altra Industrial Motion

Company:

Project:

Name:

Date:

General information

desired buffer size
size x stroke: _____

Fastening type

☐ front flange F
☐ back flange B

Field of application

☐ outdoor application
☐ indoor application

Case of application

Horizontally moved mass

☐ a) mass without propelling force (motor switched off)

☐ b) mass with propelling force (motor runs)
sum of motor power per crane side _____kW
breakdown torque factor _____Mk/Mn

Ambient temperatures

from _____°C to _____°C

Definitions and calculations	R1…R4	[kg]	wheel loads resulting from deadweight and rigidly attached loads
	M_{pu}	[kg]	mass acting on one buffer
	v	[m/s]	max. travel speed
	E_{pu}	[Nm]	energy acting on one buffer
	F_{pu}	[kN]	buffer end force

Determine the masses acting on the buffer m_{pu}

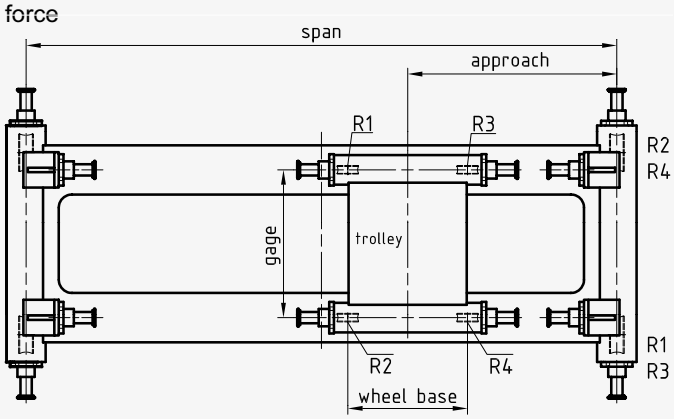
For cranes:

m_{pu} = R1+R2+R3+R4+…Rn [1])

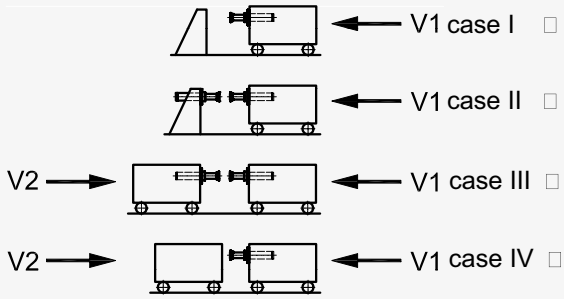
[1])For cranes with more than 4 wheels/side

For trolley:

m_{pu} = max. from (R1+R3) or (R2+R4)



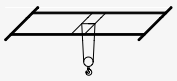
Impact conditions



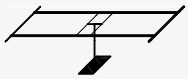
Crane/trolley weight _____ kg

Crane/trolley nominal speed_____m/min

☐ pendelation



☐ fixed load



☐ Crane/trolley drive switched off before buffer impact (fab=0,7)

Type of operation

☐ emergency-stop application
☐ impact at creep speed
☐ operational actuation

Stroke frequency _____1/h

Operating conditions

☐ normal ☐ dry ☐ humid
☐ oily ☐ dusty ☐ aggressive

Information regarding buffer design

☐ max. perm. buffer force _____ kN
☐ max. perm. buffer stroke _____ mm
☐ max. perm. deceleration _____ m/s^2

Design data of the buffer

Impact mass per buffer m_{pu} _____ [kg]
Impact speed v _____ [m/s]
Propelling force F_v _____ [N]

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