HYDRAULIC BUFFER KHP

Indications for buffer dimensioning

Please return this sheet to info@koro-riw.com

Company:

Project:

Name:

Date:

General information

desired buffer size
size x stroke: _____

quantity_____pcs.

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)
if b)
sum of motor power per crane side _____ kW motor
breakdown torque (Mk/Mn) _____

Ambient temperatures

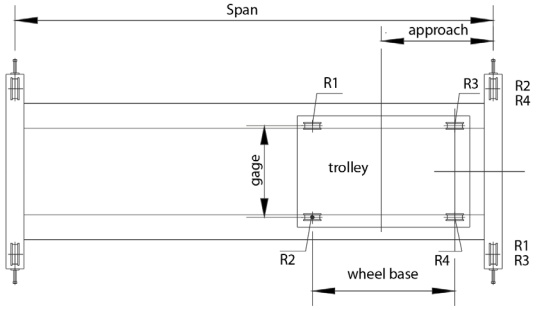
from ___°C up to ___°C

Definitions and calculation

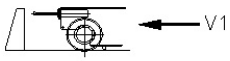
R1...Rn	[kg]	wheel loads resulting from deadweight and fixed attached loads
m_{pu}	[kg]	impact mass on one buffer
v	[m/s]	max. travel speed
E_{pu}	[kJ]	energy acting on one buffer
F_{pu}	[kN]	buffer end force

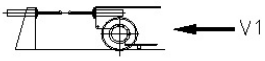
Determine the masses acting on the buffer m_{pu}

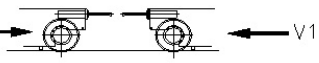
For Cranes:
m_{pu} = R1+R2+R3+R4+...Rn [1)]
[1)] *for cranes with more than 4 wheels/side*
For Trolley:
m_{pu} = max. aus (R1+R3) oder (R2+R4)

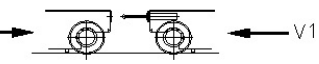


Impact conditions

☐ Case I  V1

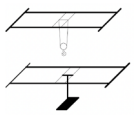
☐ Case II  V1

☐ Case III  V2 V1

☐ Case IV  V2 V1

Crane/Trolley weight _____ kg

Crane/Trolley nominal speed_____ m/min

☐ pendelation ☐ fixed load 

Crane/Trolley drive switched off before buffer impact Y N

Ambient conditions

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

Type of operation

☐ emergency stop application

☐ impact at creep speed

☐ operational actuation

stroke frequency_____ 1/h

Technical design limits of the construction

☐ max. perm. buffer force_____ kN

☐ max. perm. buffer stroke _____ mm

☐ max. perm. deceleration _____ m/s^2

Any comments or special requirements?

_____

_____

_____

Design data of the buffer

☐ impact mass per buffer m_{pu}_____ [kg]

☐ impact speed v _____ [m/s]

☐ propelling force F_v _____ [N]