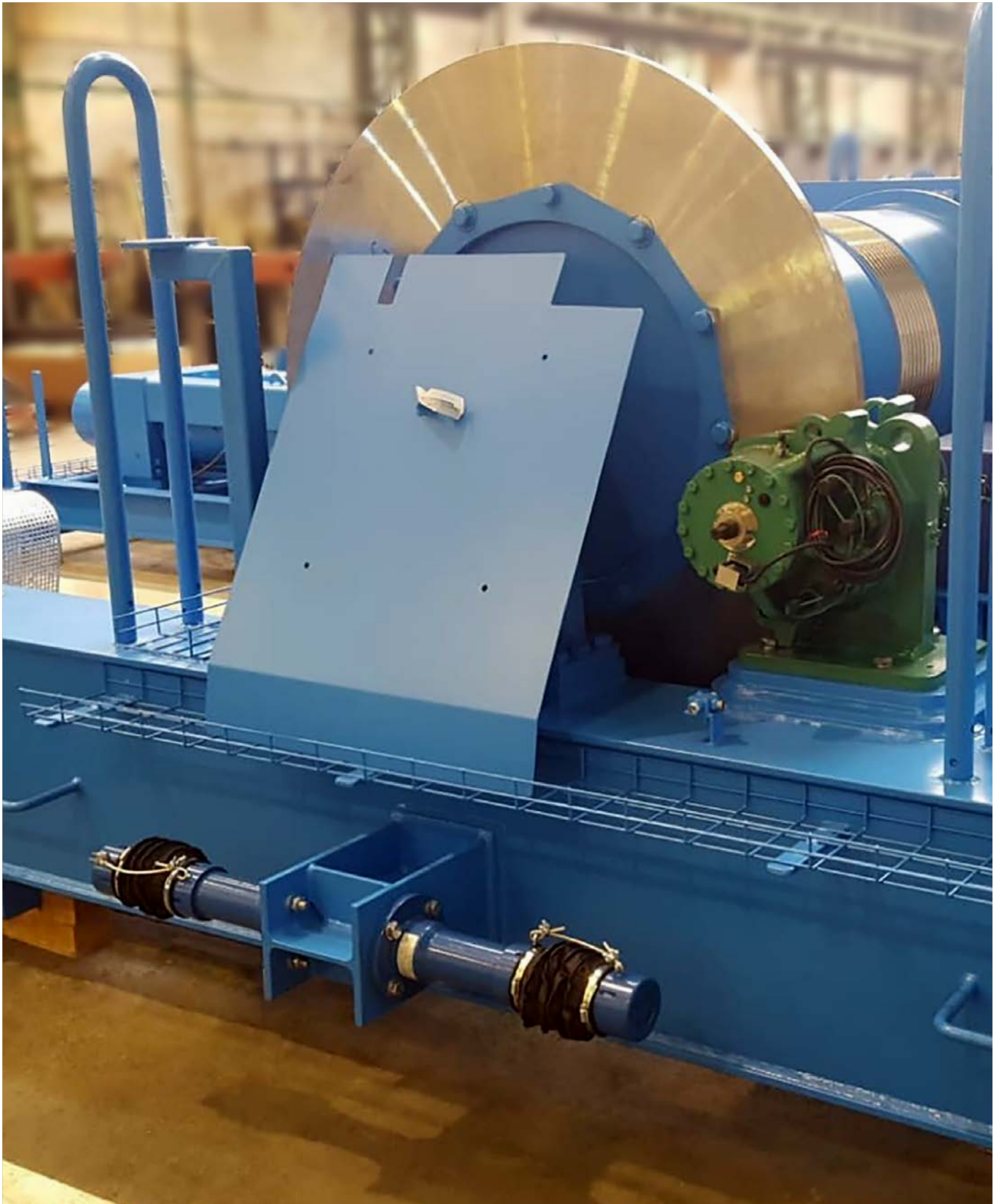


# Stromag PHS Hydraulic Buffers



# SIME Brakes Industrial Braking Systems

## PHS Hydraulic Buffers



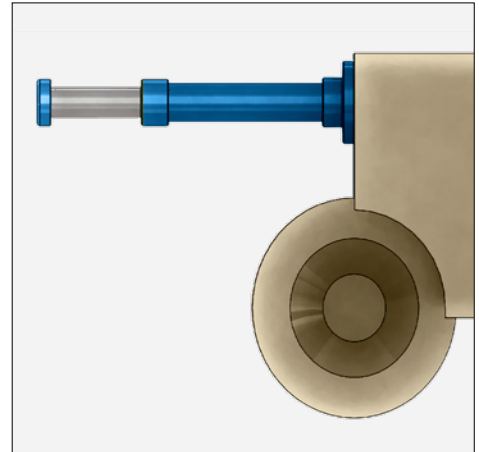
# PHS HYDRAULIC BUFFERS

## 1 - INTRODUCTION

Crash effect is a physical factor to be avoided in mechanical structures. Energy that cannot be damped through cranes working with high kinetic energy and other rail transport systems leads to crashes and therefore, to damages in the mechanical structure, and thus significantly decreases the fatigue life of the steel structures.

Buffers used to damp the energy resulting from the crash in rail transport systems and crane systems working with various load capacities and in different velocities are very important for extended life of the transport system and for security.

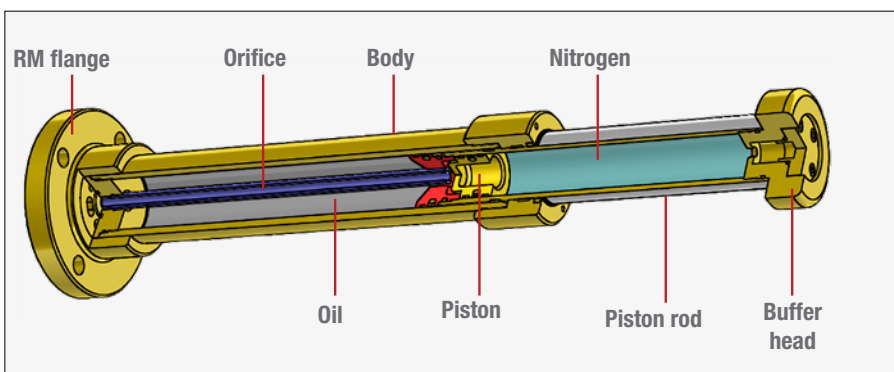
Stromag provides solutions for damping through estimations and designs in line with the related standards and international technical reports, based on the information presented by the customer. It is possible to manufacture two types of buffers as spring supported and hydraulic as well as many variations according to energy buffering capacities, strokes and connection types. In the selection of buffers, it is important to prefer the buffers with optimum values by determining the right spring and buffering coefficient.



## 2 - MAIN CHARACTERISTICS

<b>Adjustment</b>	Self adjusting type
<b>Installation</b>	Rear Mounting RM Front Mounting FM
<b>Filling</b>	Oil / Nitrogen
<b>Temperature</b>	-10 C to +80 C (standard) -40 C to +120 C (special)
<b>Piston rod</b>	Plasma coating (20 μ)

<b>Body coating</b>	Synthetic resin Color 80μM standard: RAL5009 (Azure blue)
<b>Applications</b>	Overhead cranes Container cranes Stacker cranes Transfer cars Railway applications
<b>Options</b>	Body coating: RAL1003 (signal yellow) RAL3020 (traffic red) RAL7021 (black grey) RAL9011 (graphite black)  Safety chain Protection cover



With the options:  
safety chain and protection cover

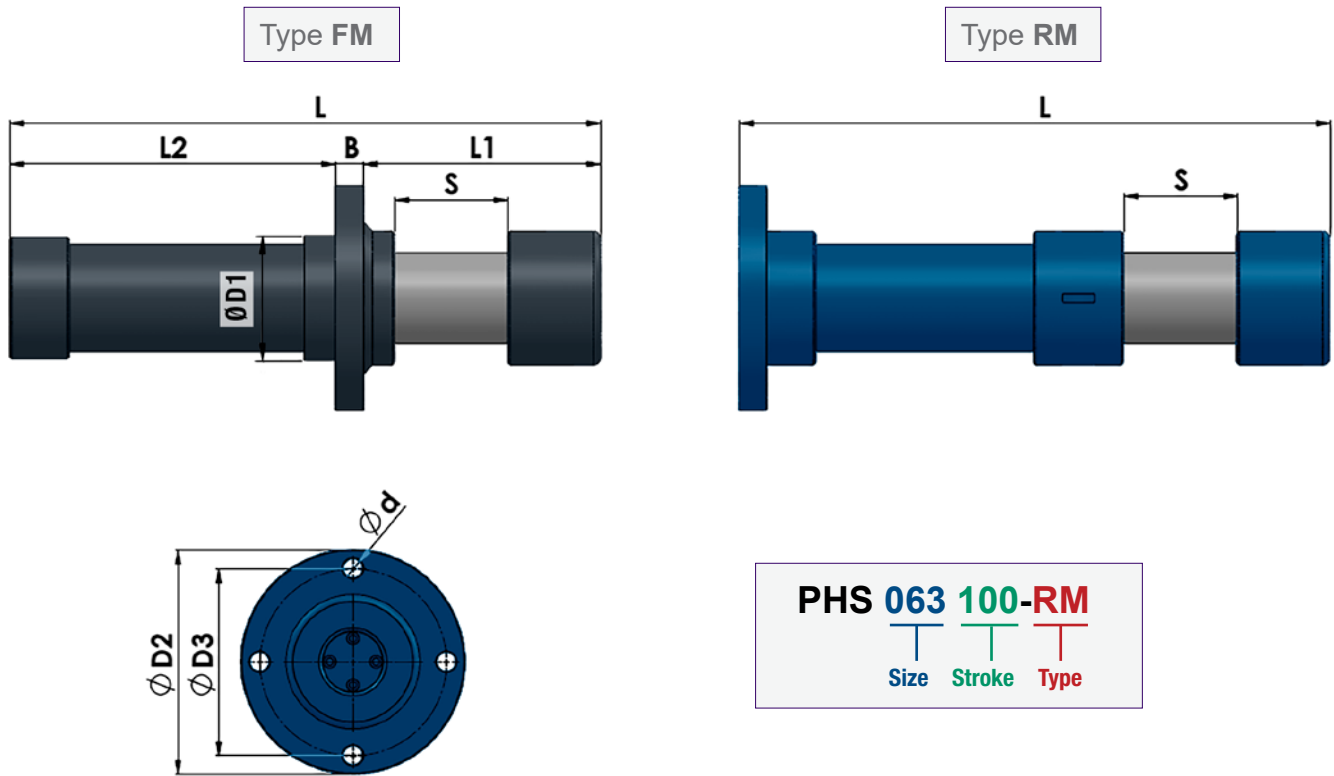
# SIME Brakes Industrial Braking Systems

## PHS Hydraulic Buffers

### TECHNICAL DATA / DIMENSIONS

Revision number: T10125-01-D Revision date: 30.09.2019

### 3 - PHS 063 - TECHNICAL DATA



Dimensions in mm	S	L	L1	L2	B	D1	D2	D3	d	W (kJ) Capacity/Stroke	F (kN) Buffering Force
PHS 063 100	100	455,5	202	233,5	20	91	168	135	17	15	170
PHS 063 150	150	568	252	296	20	91	168	135	17	23	170
PHS 063 200	200	680,5	302	358,5	20	91	168	135	17	30	170
PHS 063 250	250	793	352	421	20	91	168	135	17	38	170
PHS 063 300	300	905,5	402	483,5	20	91	168	135	17	46	170
PHS 063 350	350	1018	452	546	20	91	168	135	17	51	160
PHS 063 400	400	1130,5	502	608,5	20	91	168	135	17	54	150
PHS 063 450	450	1243	552	671	20	91	168	135	17	57	140
PHS 063 500	500	1355,5	602	733,5	20	91	168	135	17	59	130
PHS 063 550	550	1468	652	796	20	91	168	135	17	60	120
PHS 063 600	600	1580,5	702	858,5	20	91	168	135	17	60	110
PHS 063 650	650	1693	752	921	20	91	168	135	17	59	100
PHS 063 700	700	1805,5	802	983,5	20	91	168	135	17	57	90
PHS 063 750	750	1918	852	1046	20	91	168	135	17	54	80
PHS 063 800	800	2030,5	902	1108,5	20	91	168	135	17	51	70

# SIME Brakes Industrial Braking Systems

## PHS Hydraulic Buffers

### TECHNICAL DATA / DIMENSIONS

Revision number: T10125-01-D Revision date: 30.09.2019

#### 4 - PHS 080 - TECHNICAL DATA

Dimensions in mm	S	L	L1	L2	B	D1	D2	D3	d	W (kJ) Capacity/Stroke	F (kN) Buffering Force
PHS 080 100	100	522,5	209,5	288	25	110	198	165	17	23	260
PHS 080 150	150	635	259,5	350,5	25	110	198	165	17	35	260
PHS 080 200	200	747,5	309,5	413	25	110	198	165	17	48	260
PHS 080 250	250	860	359,5	475,5	25	110	198	165	17	59	260
PHS 080 300	300	972,5	409,5	538	25	110	198	165	17	68	250
PHS 080 350	350	1085	459,5	600,5	25	110	198	165	17	76	240
PHS 080 400	400	1197,5	509,5	663	25	110	198	165	17	84	230
PHS 080 450	450	1310	559,5	725,5	25	110	198	165	17	90	220
PHS 080 500	500	1422,5	609,5	788	25	110	198	165	17	95	210
PHS 080 550	550	1535	659,5	850,5	25	110	198	165	17	100	200
PHS 080 600	600	1647,5	709,5	913	25	110	198	165	17	104	190
PHS 080 650	650	1760	759,5	975,5	25	110	198	165	17	106	180
PHS 080 700	700	1872,5	809,5	1038	25	110	198	165	17	108	170
PHS 080 750	750	1985	859,5	1100,5	25	110	198	165	17	109	160
PHS 080 800	800	2097,5	909,5	1163	25	110	198	165	17	109	150

#### 5 - PHS 100 - TECHNICAL DATA

Dimensions in mm	S	L	L1	L2	B	D1	D2	D3	d	W (kJ) Capacity/Stroke	F (kN) Buffering Force
PHS 100 100	100	538,5	207	301,5	30	132	258	210	23	38	420
PHS 100 150	150	651	257	364	30	132	258	210	23	58	420
PHS 100 200	200	763,5	307	426,5	30	132	258	210	23	78	420
PHS 100 250	250	876	357	489	30	132	258	210	23	98	420
PHS 100 300	300	988,5	407	551,5	30	132	258	210	23	115	420
PHS 100 350	350	1101	457	614	30	132	258	210	23	132	420
PHS 100 400	400	1213,5	507	676,5	30	132	258	210	23	148	410
PHS 100 450	450	1326	557	739	30	132	258	210	23	161	400
PHS 100 500	500	1438,5	607	801,5	30	132	258	210	23	175	390
PHS 100 550	550	1551	657	864	30	132	258	210	23	190	380
PHS 100 600	600	1663,5	707	926,5	30	132	258	210	23	200	370
PHS 100 650	650	1776	757	989	30	132	258	210	23	210	360
PHS 100 700	700	1888,5	807	1051,5	30	132	258	210	23	220	350
PHS 100 750	750	2001	857	1114	30	132	258	210	23	230	340
PHS 100 800	800	2113,5	907	1176,5	30	132	258	210	23	240	330

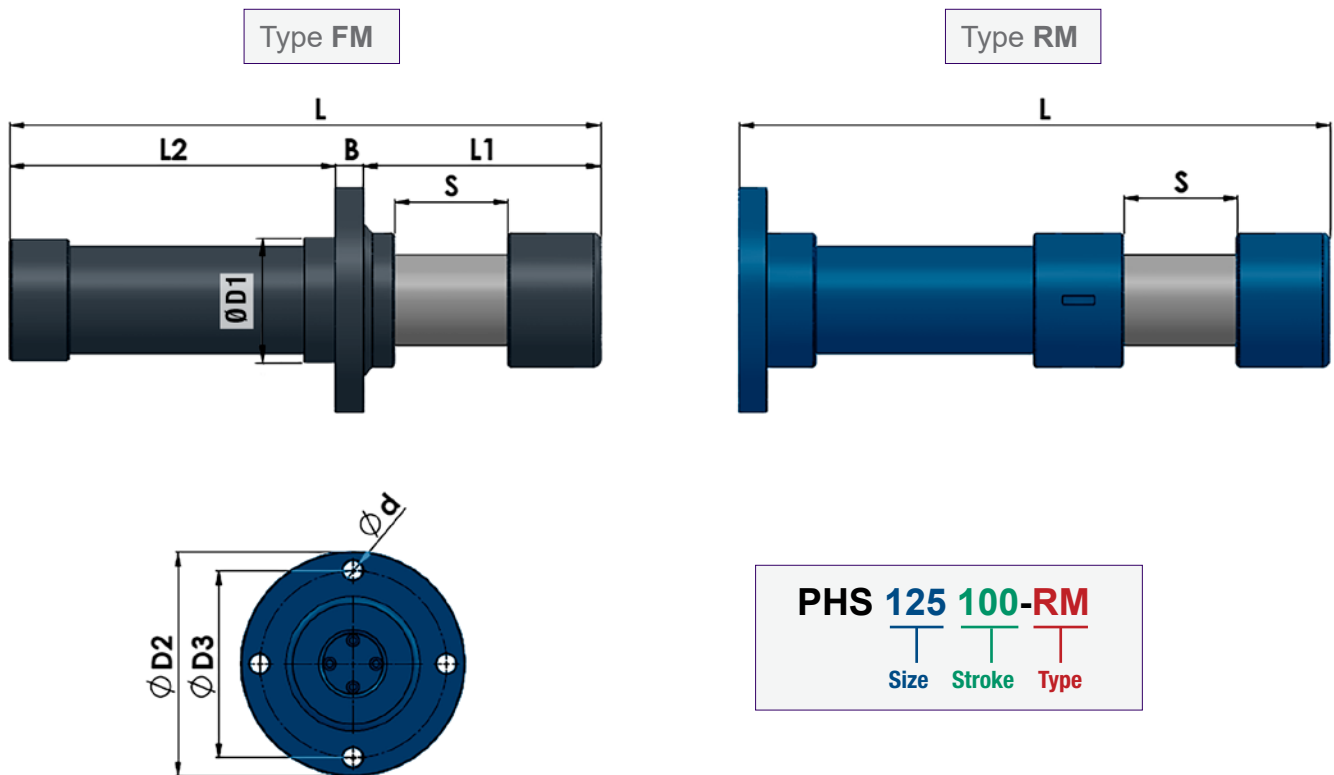
# SIME Brakes Industrial Braking Systems

## PHS Hydraulic Buffers

TECHNICAL DATA / DIMENSIONS

Revision number: T10125-01-D Revision date: 30.09.2019

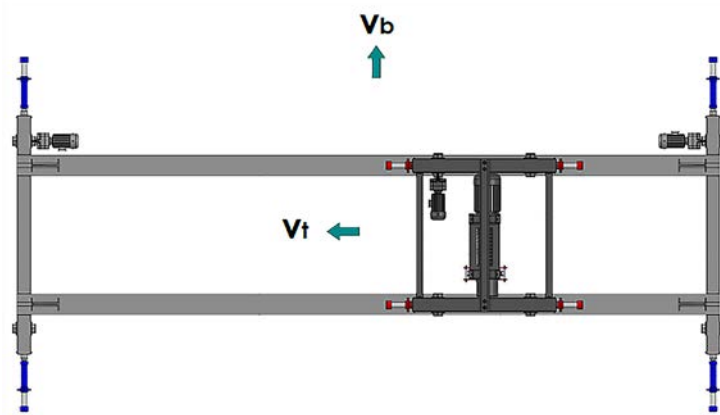
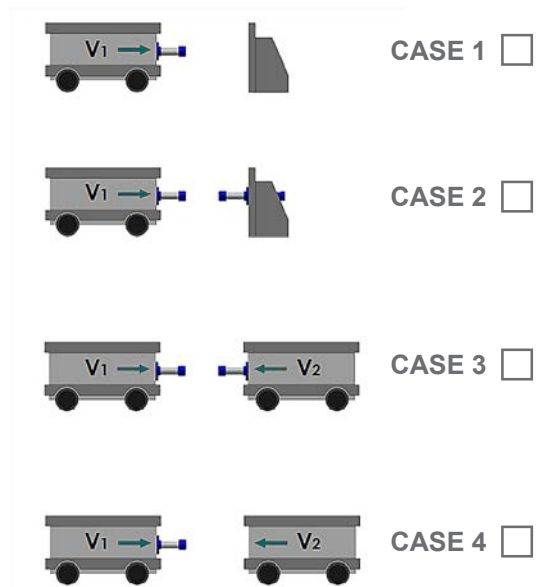
### 6 - PHS 125 - TECHNICAL DATA



Dimensions in mm	S	L	L1	L2	B	D1	D2	D3	d	W (kJ) Capacity/Stroke	F (kN) Buffering Force
PHS 125 100	100	528,5	204,5	289	35	167	300	245	27	60	670
PHS 125 150	150	641	254,5	351,5	35	167	300	245	27	91	670
PHS 125 200	200	753,5	304,5	414	35	167	300	245	27	121	670
PHS 125 250	250	866	354,5	476,5	35	167	300	245	27	154	670
PHS 125 300	300	978,5	404,5	539	35	167	300	245	27	185	670
PHS 125 350	350	1091	454,5	601,5	35	167	300	245	27	215	670
PHS 125 400	400	1203,5	504,5	664	35	167	300	245	27	248	670
PHS 125 450	450	1316	554,5	726,5	35	167	300	245	27	275	650
PHS 125 500	500	1428,5	604,5	789	35	167	300	245	27	301	650
PHS 125 550	550	1541	654,5	851,5	35	167	300	245	27	325	630
PHS 125 600	600	1653,5	704,5	914	35	167	300	245	27	351	630
PHS 125 650	650	1766	754,5	976,5	35	167	300	245	27	377	630
PHS 125 700	700	1878,5	804,5	1039	35	167	300	245	27	393	610
PHS 125 750	750	1991	854,5	1101,5	35	167	300	245	27	414	610
PHS 125 800	800	2103,5	904,5	1164	35	167	300	245	27	435	590

### 7 - QUESTIONNAIRE

Customer: \_\_\_\_\_  
 Project: \_\_\_\_\_  
 Date: \_\_\_\_\_



**Application**

Indoor

Outdoor

**Flange type**

Front **FM**

Rear **RM**

**Conditions**

Normal

Aggressive

**Information**

Max. Perm. Buffer Force: \_\_\_\_\_ kN

Max. Perm. Deceleration: \_\_\_\_\_ m/s<sup>2</sup>

**Wb** Deadweight of the Crane: \_\_\_\_\_ kg

**Vb** Velocity of the Crane: \_\_\_\_\_ m/s

**Wt** Deadweight of the Trolley: \_\_\_\_\_ kg

**Vt** Velocity of the Trolley: \_\_\_\_\_ m/s

**NOTES:**

## Stromag Facilities

### Europe

#### Germany

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*Disc Brakes & Drum Brakes*

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### North America

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860-238-4783

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219-874-5248

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**Warner Electric**  
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**Svendborg Brakes**  
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