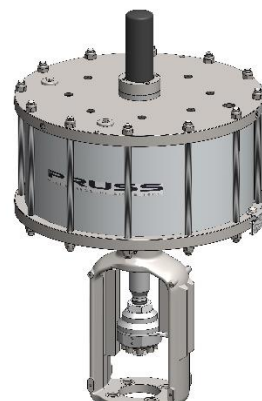




Single acting/ spring extends



single acting/ spring retracts



double acting

Features

- High forces, fast actuating speeds (no stick-slip-effect)
- Fulfills explosion proof requirements
- Operating mode: single acting (direction of action selectable) or double acting
- Mechanical stroke indicator
- Model for use with oxygen / BAM (optional)

Technical Data

Type		STPK500			STPK600			STPK700		
Effective area [cm ²]		1944			2799			3820		
Operation pressure, max. [barg]		6			6			6		
Air force at 6 barg [kN]		116,6			167,9			229,2		
Stroke 120 mm for springs	Spring range [barg]	1: 1,0 – 2,1	2: 1,3 – 2,6	3: 1,6 – 3,1	1: 0,9 – 1,8	2: 1,1 – 2,1	3: 1,6 – 2,9	1: 0,8 – 1,6	2: 1,2 – 2,1	3: 1,6 – 2,6
	Actuating force/ spring [kN]	20 – 40	25 – 50	30 – 60	25 – 50	30 – 60	45 – 80	30 – 60	45 – 80	60 – 100
Stroke 120 mm for disc springs	Spring range [barg]	1: 1,0 – 2,4	2: 1,3 – 2,5	3: 1,6 – 3,3	1: 0,9 – 1,7	2: 1,1 – 2,2	3: 1,6 – 2,9	1: 0,8 – 1,6	2: 1,2 – 2,2	3: 1,8 – 2,8
	Actuating force/ spring [kN]	20 – 46,5	25,2 – 48,2	30,4 – 63,8	25,2 – 48,2	30,4 – 61,8	45,2 – 82,6	30,4 – 61,8	45,2 – 82,6	69,7 – 107,6
Stroke 200 mm for springs	Spring range [barg]	1: 1,0 – 2,1	2: 1,3 – 2,6	3: 1,5 – 3,1	1: 0,9 – 1,8	2: 1,1 – 2,1	3: 1,6 – 2,9	1: 0,8 – 1,6	2: 1,2 – 2,1	3: 1,6 – 2,6
	Actuating force/ spring [kN]	20 – 40	25 – 50	30 – 60	25 – 50	30 – 60	45 – 80	30 – 60	45 – 80	60 – 100
Stroke 200 mm for disc springs	Spring range [barg]	1: 1,0 – 2,4	2: 1,3 – 2,5	3: 1,6 – 3,3	1: 0,9 – 1,7	2: 1,1 – 2,3	3: 1,6 – 3,0	1: 0,8 – 1,7	2: 1,2 – 2,2	3: 1,8 – 2,9
	Actuating force/ spring [kN]	20,2 – 47,5	25,2 – 48,2	30,4 – 64,1	25,2 – 48,2	30,4 – 64,1	45,4 – 83,9	30,4 – 64,1	45,4 – 83,9	69,7 – 110,4
Stroke 300 mm for springs	Spring range [barg]	1: 0,7 – 2,7	2: 1,0 – 3,3	3: 1,6 – 4,3	1: 0,6 – 2,2	2: 1,1 – 3,0	3: 1,7 – 3,8	1: 0,8 – 2,2	2: 1,2 – 2,8	3: 1,6 – 3,3
	Actuating force/ spring [kN]	14,4 – 51,9	18,8 – 63,8	30,5 – 84,5	17,3 – 62,3	30,5 – 84,5	46,4 – 106,5	30,5 – 84,5	46,5 – 106,5	60 – 125,6
Air connection		3 x G1"			3 x G1"			3 x G1"		
Weight double acting [kg] (120/200 stroke)		310/ 355			470/ 525			705/ 730		
Weight single acting [kg] (with springs: 120/200/300 stroke)		460/ 540/ 715			650/ 760/ 980			970/ 1045/ 1360		
Weight single acting [kg] (with disc springs: 120/200 stroke)		570/ 680			790/ 950			1050/ 1250		

Standard material for the sealing:

NBR

Ambient temperature range:

-40 to +80°C

-50 to +80°C Low temperature version

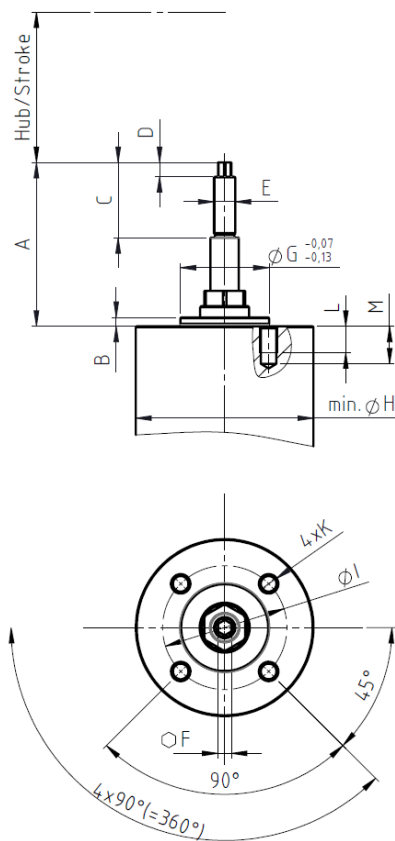
-20 to +60°C oxygen version/ BAM

Painting:

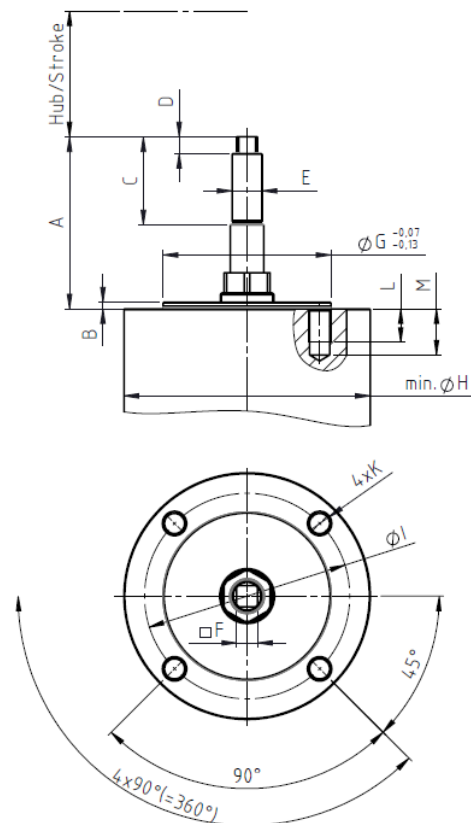
RAL 5011

WALDEMAR PRUSS ARMATURENFABRIK GMBH		Schulenburger Landstraße 261 D – 30419 Hannover • Germany Telefon (0511) 27986- 0 Telefax (0511) 27986- 86
	Ident.-No.: 9005-0003-EN Rev.0	

Connection dimensions for the STPK 500-700 (single-acting and double-acting)



Stroke: 40-120mm (source:9005-0005)



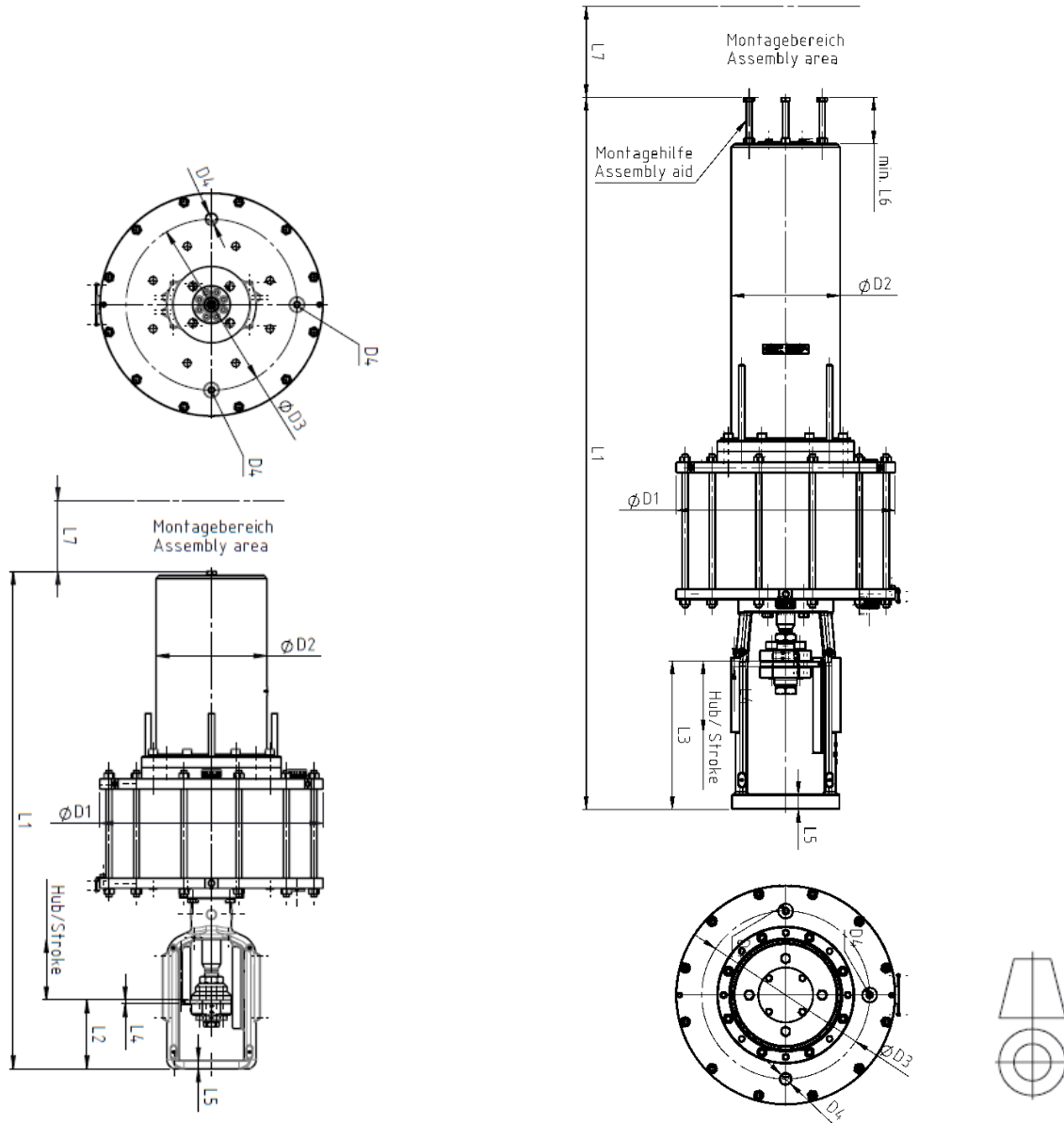
Stroke: 40-300mm (source:9005-0004)

Dimensions

Type STPK	Hub	A	B	C	D	E ₂	F	G	H	I	K	L	M
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
500	40-120	185	8	85	16	M20x1,5 M24x1,5	Ø15 Ø15	100	180	140	M20	30	42
	125-300	205	8	105	20	M30x1,5 M36x1,5	□20 □25	200	294	245	M27	40	55
600	40-120	205	8	105	20	M30x1,5 M36x1,5	□20 □25	200	294	245	M27	40	55
	125-300					M30x1,5 M36x1,5	□20 □25						
700	40-120					M36x1,5 M42x2	□25 □25						
	125-300					M36x1,5 M42x2	□25 □25						

2) Permissible spindle connection at an operating pressure of 6 bar

Dimensional drawing STPK 500 (single acting)



Spring closes (Quelle:9005-0006 Bl.1):

Spring open (Quelle:9005-0006 Bl.2):

Dimensions

Type STPK	active function	Hub	L1	D1	L2	L3	L4	D2	L5	D3	D4	min. L6
		mm	mm	mm	mm	mm	mm	mm	mm	mm	-	mm
500	Spring closes -SF	40-120	1340	600	185	-	10	300	21,5	460	G1“	-
	Spring open -SF		1455		-	305						126
	Spring closes -TF	40-120	1630		185	-		273				-
	Spring open -TF		1830		-	305						126
	Spring closes -SF	125-200	1835		205	-	15	300	39			-
	Spring open -SF		1950		-	405						126

SF: Spring

TF: Disc spring

WALDEMAR PRUSS
ARMATURENFABRIK GMBH

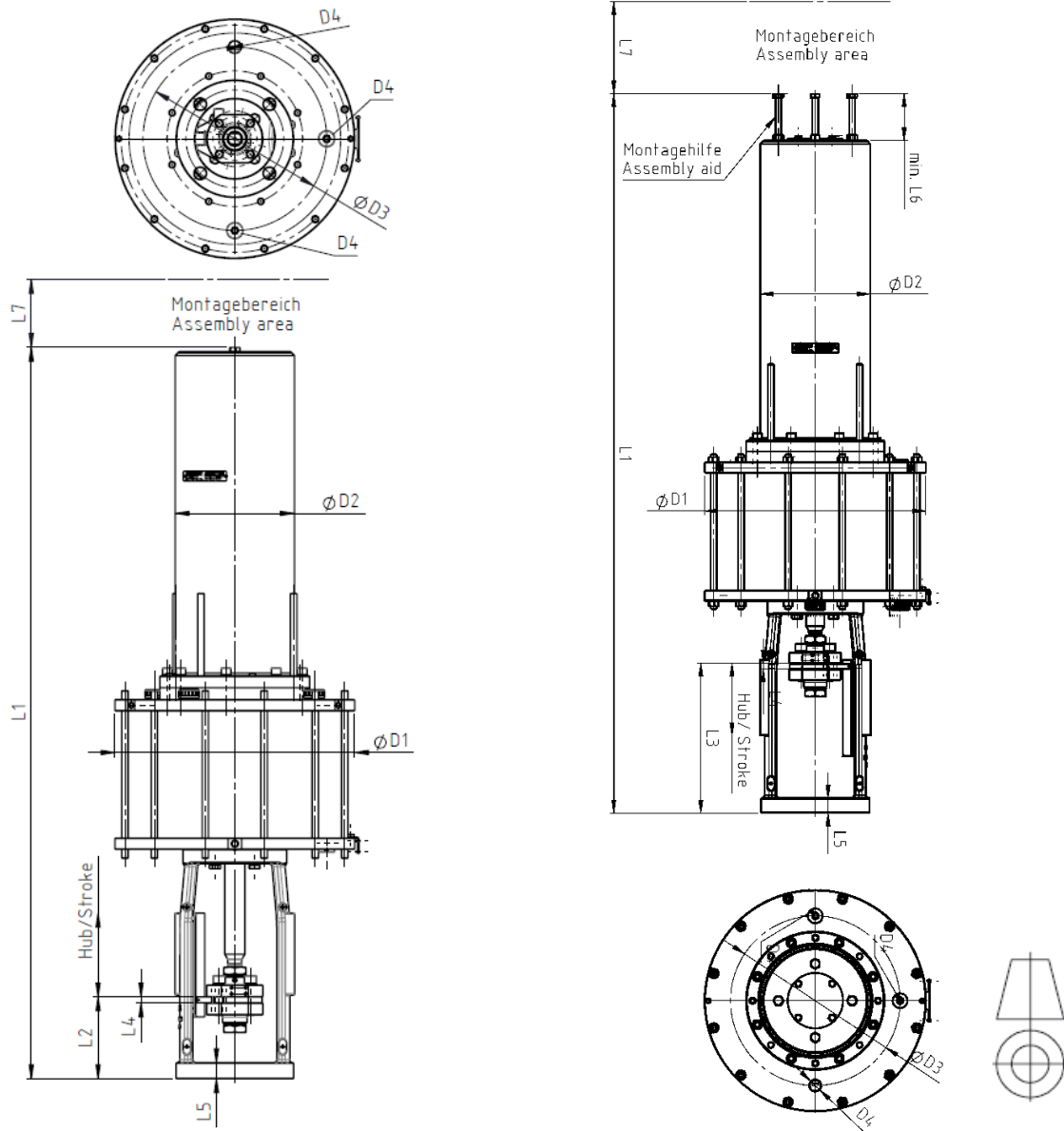
PRUSS
UNDER PRESSURE SINCE 1889.

Ident.-No.: 9005-0003-EN Rev.0

Schulenburg Landstraße 261
D – 30419 Hannover • Germany
Telefon (0511) 27986- 0
Telefax (0511) 27986- 86

Page 3 to 7

Dimensional drawing STPK 600 (single acting)



Spring closes (Quelle:9005-0006 Bl.1):

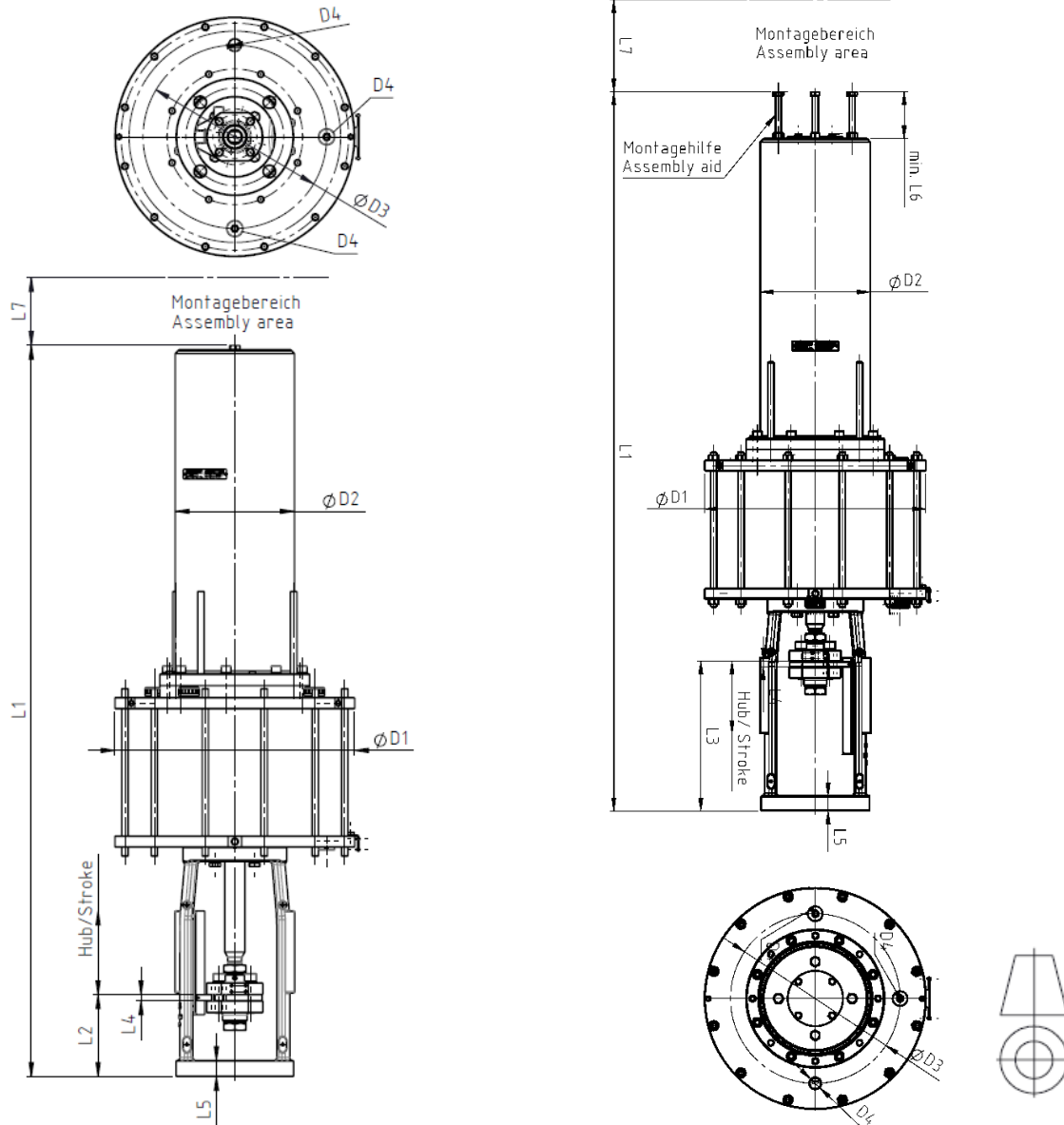
Spring open (Quelle:9005-0006 Bl.2):

Dimensions

Type STPK	active function	Hub	L1	D1	L2	L3	L4	D2	L5	D3	D4	min. L6
		mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
600	Spring closes -SF	40-	1515	700	205	-	15	325	39	550	G1"	-
	Spring open -SF	120	1630		-	325		273				126
	Spring closes -TF	40-	1960		205	-		325				-
	Spring open -TF	120	2160		-	325		325				126
	Spring closes -SF	125-	1950		205	-		325				-
	Spring open -SF	200	2070		-	405		325				126

SF: Spring
TF: Disc spring

Dimensional drawing STPK 700 (single acting)



Spring closes (Quelle:9005-0006 Bl.1):

Spring open (Quelle:9005-0006 Bl.2):

Dimensions

Type STPK	active function	Hub	L1	D1	L2	L3	L4	D2	L5	D3	D4	min. L6
		mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
600	Spring closes -SF	40-	1685	800	205	-	15	356	39	645	G1"	-
	Spring open -SF	120	1800		-	325		273				126
	Spring closes -TF	40-	1975		205	-		356				-
	Spring open -TF	120	2175		-	325		273				126
	Spring closes -SF	125-	2060		205	-		356				-
	Spring open -SF	200	2180		-	405		273				126

SF: Spring
TF: Disc spring

WALDEMAR PRUSS
ARMATURENFABRIK GMBH

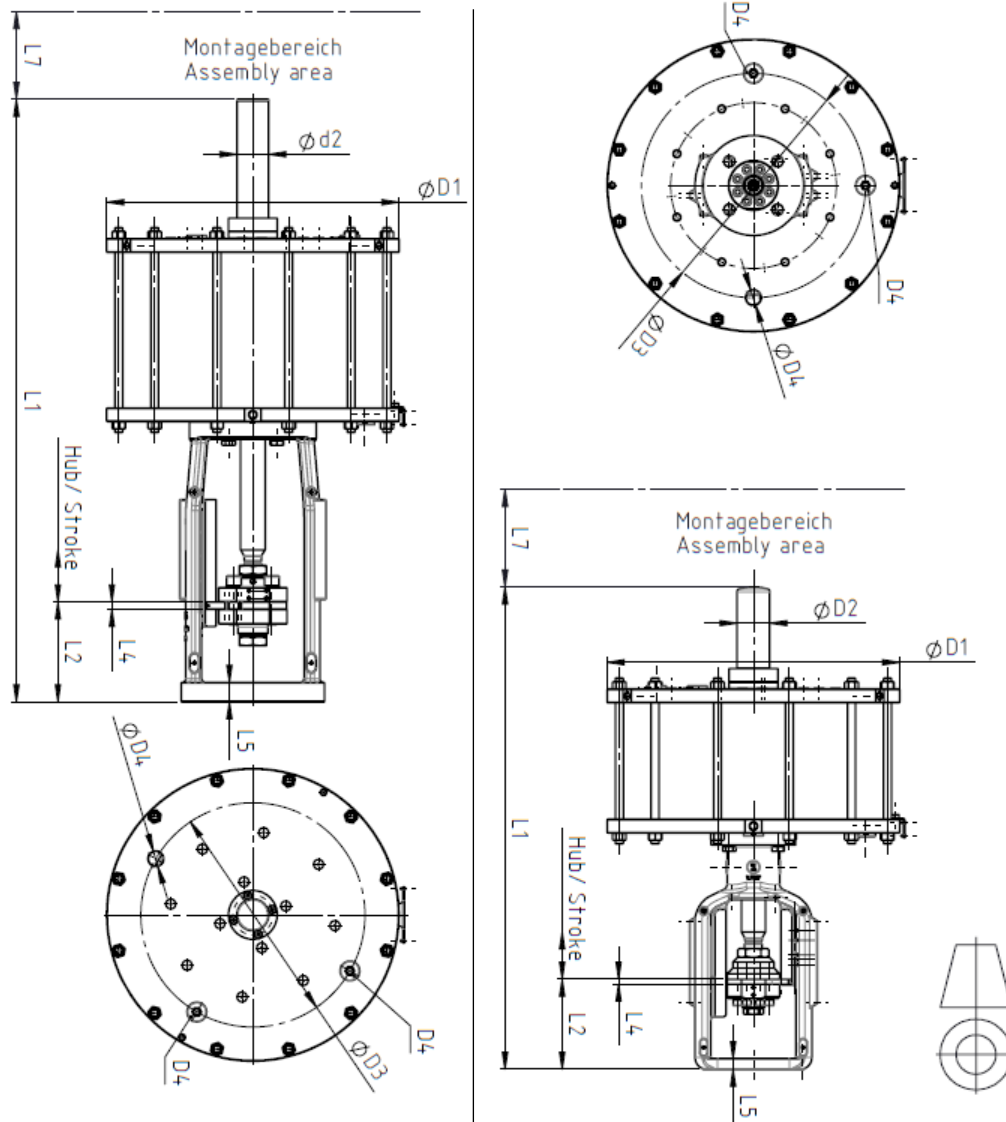
PRUSS
UNDER PRESSURE SINCE 1889.

Ident.-No.: 9005-0003-EN Rev.0

Schulenburg Landstraße 261
D – 30419 Hannover • Germany
Telefon (0511) 27986- 0
Telefax (0511) 27986- 86

Page 5 to 7

Dimensional drawing STPK 500-600-700 (double acting) (source:9005-0006 Bl.3):



Dimensions

Type STPK	Active function	Hub	L1	D1	L2	L4	D2	L5	D3	D4
		mm	mm	mm	mm	mm	mm	mm	mm	-
500	Without spring	40-120	990	600	185	10	67	21,5	460	G1"
		125-200	1240		205	15	65	39		
600		40-120	1120	700	205	15	67	39	550	
		125-200	1295				65			
700		40-120	1140	800	205	15	67		645	
		125-200	1300				65			

Actuator accessories

- Installation of accessories according to NAMUR
- Mounting kit for mechanical limit switches
- Mounting kit for inductive limit switches
- Further accessories on request

WALDEMAR PRUSS ARMATURENFABRIK GMBH	PRUSS UNDER PRESSURE SINCE 1889.	Schulenburger Landstraße 261 D – 30419 Hannover • Germany Telefon (0511) 27986- 0 Telefax (0511) 27986- 86
	Ident.-No.: 9005-0003-EN Rev.0	

Type code

STPK-	□□□□-	□	□□□	□□	□	□	□	□	□	□
Operating mode	spring closes	0								
	spring opens	1								
	without springs	2								
Size	0500									
Stroke	040-050-060-080-100-120									
	125-150-175-200									
	225-250-275-300									
Spring area	1			01						
	2			02						
	3			03						
	double acting			04						
Spring type	compression spring				0					
	disc spring				1					
	Without				2					
Size	0600									
Stroke	040-050-060-080-100-120									
	125-150-175-200									
	225-250-275-300									
Spring area	1			01						
	2			02						
	3			03						
	double acting			04						
Spring type	compression spring				0					
	disc spring				1					
	Without				2					
Size	0700									
Stroke	040-050-060-080-100-120									
	125-150-175-200									
	225-250-275-300									
Spring area	1			01						
	2			02						
	3			03						
	double acting			04						
Spring type	compression spring				0					
	disc spring				1					
	Without				2					
Non-contact position measuring system	Without					0				
	with					1				
Mounting brackets for mechanical limit switches	without						0			
	with						1			
Mounting brackets for proximity switches	without							0		
	with							1		
Specials	without								0	
	with								1	
	oxygen								2	
	low temperature -50°C								3	
Painting	standard									0
	specials									1

Example: STPK-0500-012001010000

Size:	500	0500
Operating mode:	spring closes	0
Stroke:	120 mm	120
Spring range:	1,0 - 2,1 bar	01
Spring type:	compression spring	1
Non-contact position measuring system:	with	1
Brackets for mechanical limit switches:	without	0
Brackets for proximity switches:	without	0
Specials:	without	0
Painting:	standard	0