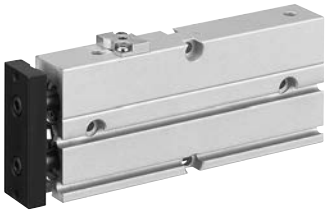
Piston rod cylinder → Supplementary products

Double piston cylinder, Series TWC-RL

► Ø16 - 25 mm ► double-acting ► with magnetic piston ► cushioning: elastic ► end position lock: extended cylinder



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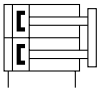

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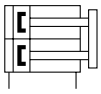
Ambient temperature min./max.	+0 °C / +60 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 1 mg/m³
Working pressure min./max.	1.5 bar / 7 bar
Pressure for determining piston forces	6,3 bar
Materials:	
Housing	Aluminum, anodized
Front plate	Steel galvanized
Piston rod	Steel, hardened
Seal	Acrylonitrile Butadiene Rubber
Guide bushing	Aluminum, anodized
Front cover	Steel, nickel-plated
End cover	Polyoxymethylene

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter „Technical information“.
- Safety function: end position lock with pressure drop

Piston Ø		**[mm]**	**2x16**	**2x20**	**2x25**		
Port			M5	M5	M5		
Retracting piston force		[N]	189	296	475		
Extracting piston force		[N]	253	395	618		
Speed max.		[m/s]	0.5	0.5	0.5		
Max. holding force when locked		[N]	96	150	235		
Max. play with locked end position		[mm]	1	1	1		
Max. retracted stroke setting		[mm]	-5	-5	-5		
Cushioning energy max.		[J]	0.11	0.17	0.23		
Weight	10 mm stroke	[kg]	0.26	0.39	0.67		
	+10 mm stroke	[kg]	0.033	0.049	0.051		

	Piston Ø	**16**	**20**	**25**		
	Stroke 10	R402000870	R402000878	R402000886		
	20	R402000871	R402000879	R402000887		
	30	R402000872	R402000880	R402000888		
	40	R402000873	R402000881	R402000889		
	50	R402000874	R402000882	R402000890		
	60	R402000875	R402000883	R402000891		
	70	R402000876	R402000884	R402000892		
	80	R402000877	R402000885	R402000893		

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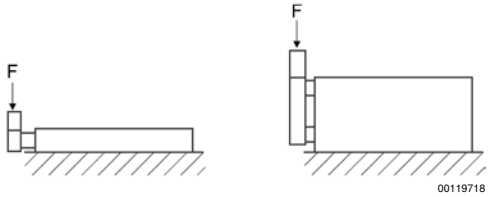
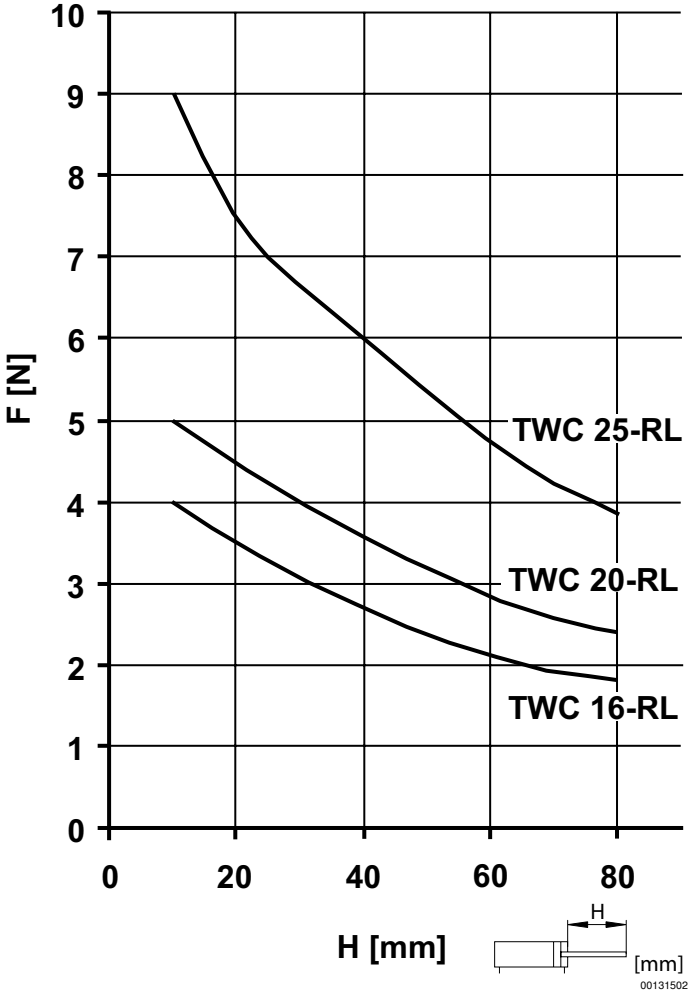
Max. transverse force F depending on the stroke length



16 - 25 mm



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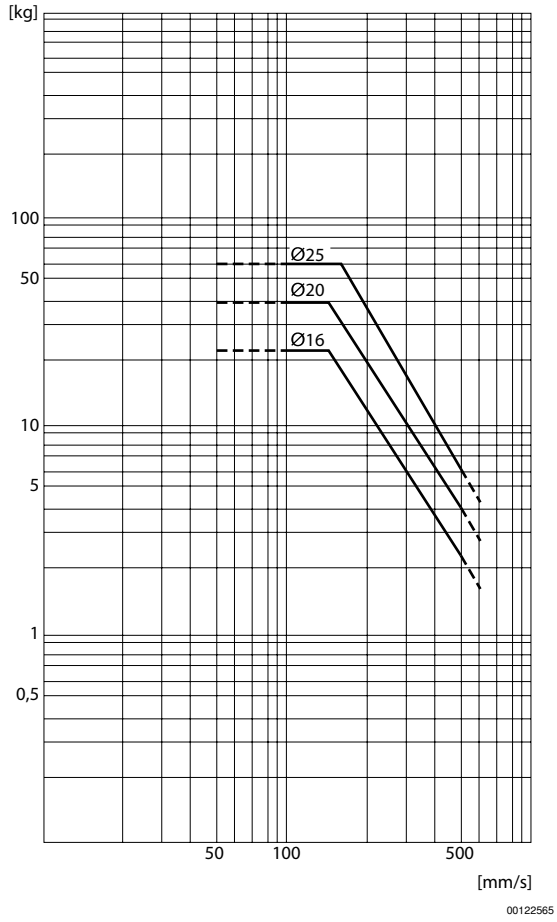
Maximum permissible moving mass depending on the impact speed



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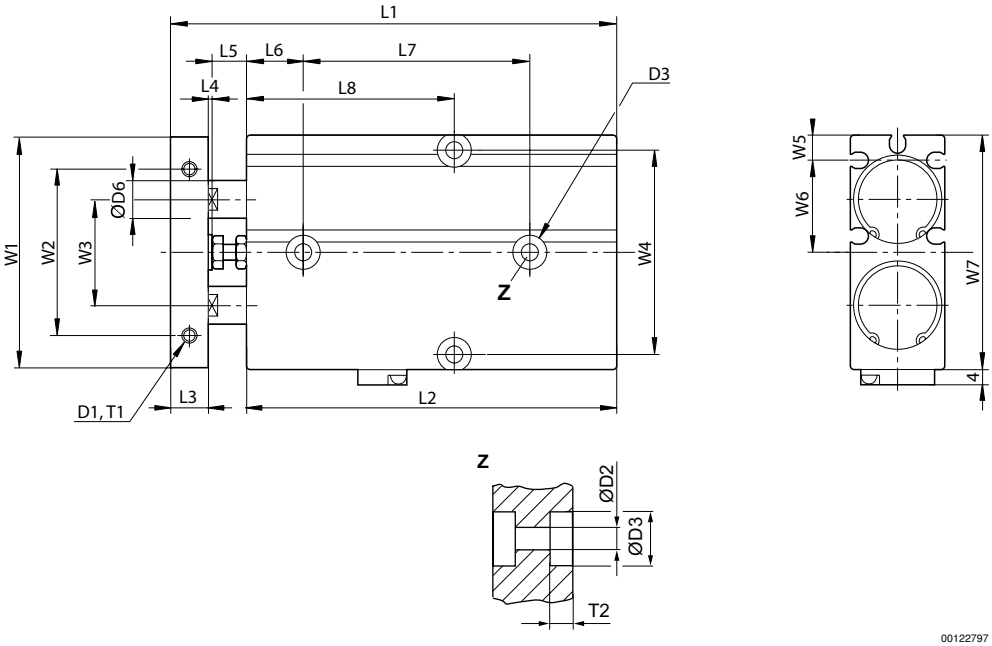
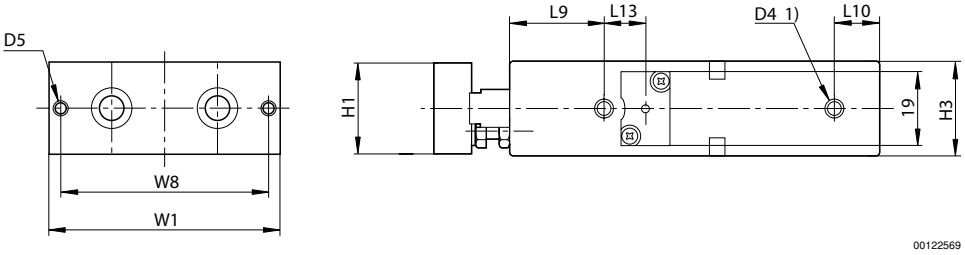
TWC 16-RL - 25-RL





1) Compressed air connection
T1 = depth of thread

Piston Ø	D1	T1	Ø D2	Ø D3	T2	D4	D5	Ø D6	H1	H3	L1 ±0,8 1)	L2 ±0,2 S=10 2)
16	2xM4	5	4,5	8	5,5	M5	2xM4	8	20	21	88	83
20	2xM4	5	4,5	8	5,5	M5	2xM4	10	24	25	98	88
25	2xM5	6	4,5	9	6	M5	2xM4	12	29	30	101	92

Piston Ø	L2 ±0,2 S=20 2)	L2 ±0,2 S=30 2)	L2 ±0,2 S=40 2)	L2 ±0,2 S=50 2)	L2 ±0,2 S=60 2)	L2 ±0,2 S=70 2)	L2 ±0,2 S=80 2)	L3	L4	L5	L6
16	93	103	113	123	133	143	153	8	1	6	15
20	98	108	118	128	138	148	158	10	1	9	15
25	102	112	122	132	142	152	162	10	1	8	15

Piston Ø	L7 ±0,2 1)	L8 ±0,2 S=10 2)	L8 ±0,2 S=20 2)	L8 ±0,2 S=30 2)	L8 ±0,2 S=40 2)	L8 ±0,2 S=50 2)	L8 ±0,2 S=60 2)	L8 ±0,2 S=70 2)	L8 ±0,2 S=80 2)	L9	L10
16	40	45	45	50	55	60	65	70	75	22	10
20	40	45	45	50	55	60	65	70	75	25	12
25	50	50	50	55	60	65	70	75	80	30	12

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Piston Ø	L13	W1	W2 ±0,2	W3	W4 ±0,2	W5	W6	W7	W8 ±0,2			
16	11	53	34	24	47	5.7	18.5	54	47			
20	11	61	44	28	55	6.8	20	62	55			
25	9	72	56	34	66	8.3	22.5	73	66			

S = stroke
1) + Stroke
2) Dimensions for corresponding stroke