Profile Dampers TR-H, Radial Damping, Hard Version

Material: Co-Polyester Elastomer.

Maintenance-free, self-contained damping element. The radial deformation provides a very soft deceleration with a progressive energy absorption towards the end of the stroke. The excellent temperature characteristic of the material provides consistent damping performance over a temperature range of -40°C to +90°C. The low weight, the economic price and the long operating life of up to 1 million cycles makes this an attractive alternative to hydraulic end position damping, if the moving mass does not need to stop in an exact datum position and it is not necessary to absorb 100% of the incoming energy. The life cycle is up to 20 times longer than for urethene dampers and up to ten times longer than for rubber.

Environment: Resistant to oil, grease seawater and to microbe or chemical attack. Excellent UV and ozone resistance. Material does not absorb water or swell.

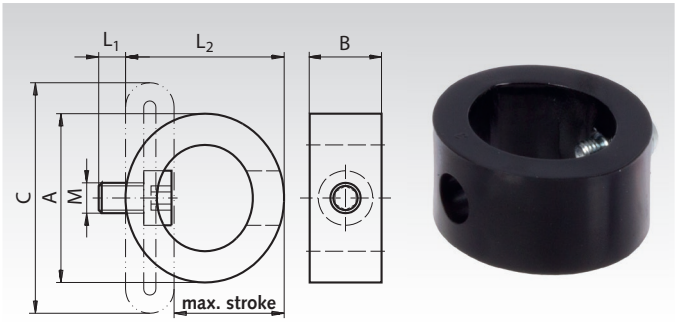
Dynamic Force Range: 550 N to 21,200 N.

Temperature Range: -40°C to +90°C.

Energy Absorption: 39% to 62%.

Material Hardness: Shore 55D.

Ordering Details: e.g.: Product No. 691 330 00, Profile Damper TR 30-15H



Mounting: in any position. **Impact Velocity range:** up to max. 5 m/s.

Mounting Bolt Torque:
M5: 4 Nm
M6: 6 Nm
M8: 20 Nm

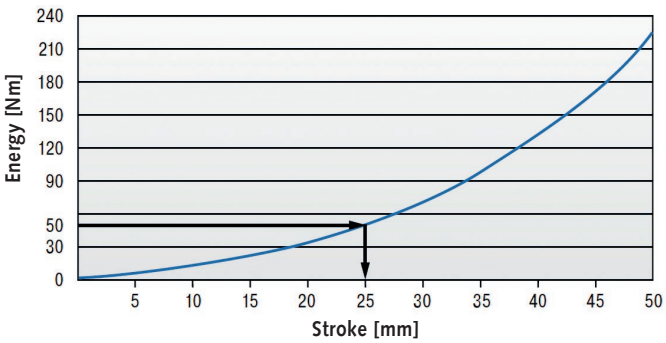
On request: special strokes, characteristics, spring rates, sizes and materials.

Product No.	Type mm	W_3 [1] Nm/Stroke	$W_{3\,max}$ [2] Nm/Stroke	max. Stroke mm	A mm	B mm	C mm	L_1 mm	L_2 mm	M Thread	Weight g
691 330 00	30-15H	2,7	5,7	15	30	13	38	5	23	M5	9
691 339 00	39-19H	6	18	19	39	19	50	5	30	M5	13
691 345 00	45-23H	8,7	24	23	45	20	58	5	36	M5	19
691 352 00	52-32H	11,7	20	32	52	34	68	5	42	M5	30
691 364 00	64-41H	25	46	41	64	43	87	5	53	M5	54
691 368 00	68-37H	66,5	98	37	68	46	88	5	56	M5	95
691 379 00	79-42H	81,5	106	42	79	46	102	6	64	M6	107
691 386 00	86-45H	124	206	45	86	51	109	6	69	M6	152
691 387 00	87-46H	158	261	46	86	67	111	8	68	M8	188
691 395 00	95-50H	228	342	50	95	82	124	8	77	M8	281
691 398 00	102-56H	290	427	56	102	81	133	8	84	M8	334

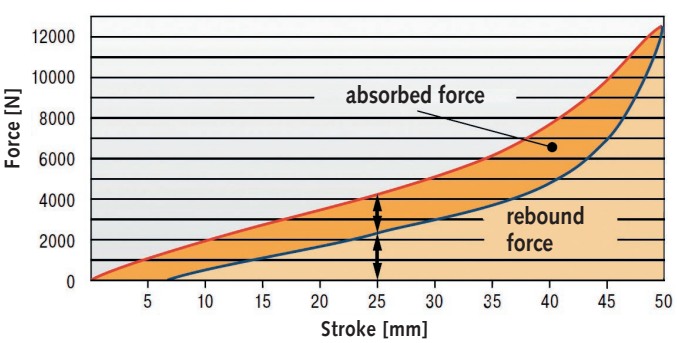
[1] Max. energy capacity per cycle for continuous use. [2] For a single cycle, e.g. an emergency stop.

Characteristics of Product No. 691 395 00

Energy-Stroke Characteristics (dynamic)



Force-Stroke Characteristics (dynamic)



With aid of the characteristics curves above you can determine the amount of energy that will be absorbed.
Example: Energy to be absorbed 50 Nm = stroke needed 25 mm see chart energy-stroke characteristic. The energy stroke chart serves to determine the absorbed or rebound energy at a given stroke length.
Dynamic (v>0.5 m/s) and static (v≤0.5 m/s) characteristics for all types available on request.