

SPEBA® strip slide bearings M F90 are a further development of the SPEBA® strip slide bearings type M. All technical data can be found in the data sheets of the SPEBA® strip slide bearings type M. They perform the same tasks: load centering through the elastomer core, assumption of torsion angles, release of displacement paths, avoidance of shear cracks, additional built-in fire protection of the bed joint (F 90 according to DIN 4102). Fire protection elements installed in the warehouse close and protect the bearing joint in the event of a fire. Damage to the bearing is prevented and the full functionality of the bearing remains.

An expert opinion of the Technical University of Braunschweig confirmed the applicability of requirements to fire resistance class F90 acc. DIN 4102.

bearing types:

SPEBA® Slidingbearing Typ M F90-1

SPEBA® Slidingbearing Typ M F90-2

The bearings can be selected with one-sided or two-sided fire protection.



properties	Typ M F90-1	Typ M F90-2
lamination		hard foam underside; lateral filler
requirements to the bearing surface		abraded mortar bed or concrete ring anchor
application	use type M5 for ceiling spans $\geq 6\text{m}$ at smaller bearing rotation angle	use type M10 for ceiling spans $\geq 6\text{m}$ with larger bearing rotation angle
thickness t	8,0 mm for type M5	13,0 mm for type M10
sliding stroke		$u_{R,d} \leq 25,0 \text{ mm}$
resistance $F_{R,d}$ (GZT/ULS)		$F_{R,d} = 4,2 \times k$ [kN/m] :with k in mm
usability C_d (GZG/SLS)		$C_d = 3,0 \times k$ [kN/m] :with k in mm
rotatability $\alpha_{R,d}$	$\alpha_{R,d} = 1500 / k$ [%] for type M5	$\alpha_{R,d} = 3000 / k$ [%] for type M10
dimensions		single length 1000 mm
core width $k^{2)}$		standard sizes: 25mm, 50 mm, 75 mm, 100 mm
operating temperature		-30°C to +60°C
sliding behaviour		friction coefficient $\mu_{R,d} \leq 0,10$ sliding range $u_{xy,R,d} = \pm 20,0 \text{ mm}$

²⁾ in between and special sizes up to 350 mm possible

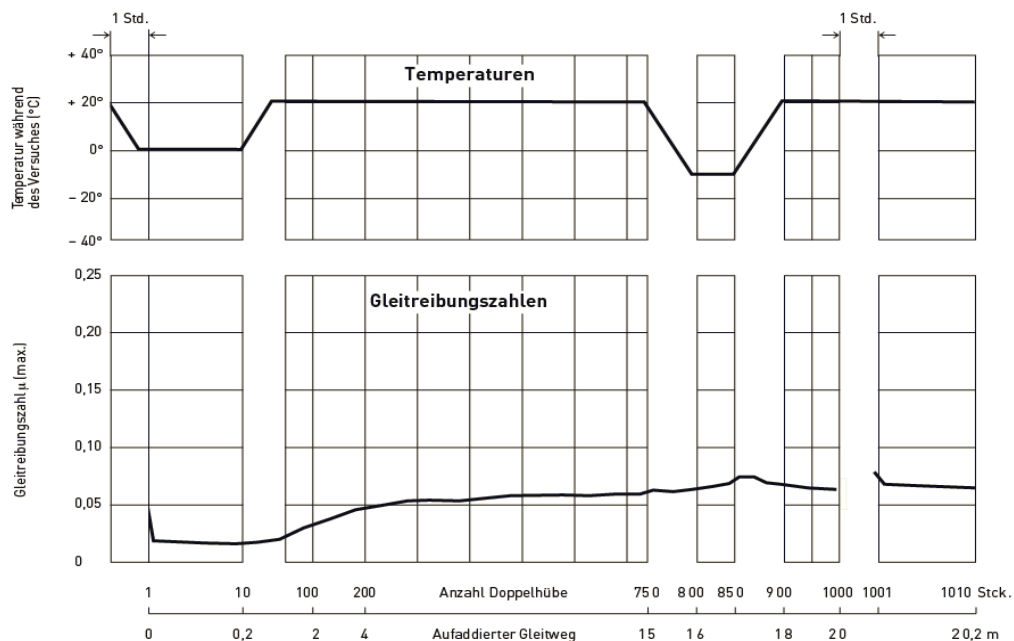
Please order SPEBA® strip slide bearings type M listed below according to table "bearing data" with the addition F90-1 for one-sided or F90-2 for two-sided fire protection.

bearing data	M 5	M 10	M 5	M 10	M 5	M 10	M 5	M 10
working loads per lm [SLS]	75 kN/m		150kN/m		225 kN/m		300 kN/m	
loads per lm (F _{Ed}) [ULS]	≤105 kN/m		≤210 kN/m		≤315 kN/m		≤420 kN/m	
core width [k]*	25 mm	-	50 mm		75 mm		100 mm	
rotatability α _{Rd} [%]	40	-	30	40	20	40	15	30
bearing width [a]*	item number M F90-1		item number M F90-1		item number M F90-1		item number M F90-1	
115 mm	020125	-	020150	022150	020175	022175	-	-
150 mm	020625	-	020650	022650	020675	022675	020610	022610
175 mm	020225	-	020250	022250	020275	022275	020210	022210
200 mm	020725	-	020750	022750	020775	022775	020710	022710
240 mm	020325	-	020350	022350	020375	022375	020310	022310
300 mm	020425	-	020450	022450	020475	022475	020410	022410
365 mm	020525	-	020550	022550	020575	022575	020510	022510
bearing width [a]*	item number M F90-2		item number M F90-2		item number M F90-2		item number M F90-2	
115 mm	021125	-	021150	023150	021175	023175	-	-
150 mm	021625	-	021650	023650	021675	023675	021610	023610
175 mm	021225	-	021250	023250	021275	023275	021210	023210
200 mm	021725	-	021750	023750	021775	023775	021710	023710
240 mm	021325	-	021350	023350	021375	023375	021310	023310
300 mm	021425	-	021450	023450	021475	023475	021410	023410
365 mm	021525	-	021550	023550	021575	023575	021510	023510

*) Intermediate and special sizes are possible on request. Please ask us for this.

SPEBA® strip slide bearings type M are constantly monitored by MPA Stuttgart in the form of production controls. The following diagram shows an average result of such a check. The sliding behavior of the SPEBA® strip slide bearing type M F90 with fire protection is corresponding.

Surface pressure $\sigma = 3 \text{ N/mm}^2$ | preload time $t_v = 1 \text{ hour}$ | sliding path (single stroke) $w = 0 - 10 \text{ mm}$
Please request the respective test report.



DISCLAIMER:

With our information we want to advise you based on our tests and experiences to the best of our knowledge and belief. However, SPEBA® Bauelemente GmbH cannot guarantee the processing result in individual cases due to the large number of possible uses and the storage, processing and construction site conditions for our SPEBA® products that are beyond our control. Own tests are to be carried out. Our technical customer service will be happy to assist you. This data sheet is not subject to an update service! All information is provided without guarantee. The current, valid version is available at www.speba.de