

TECHNICAL DATA

The following input loads, displacements and rotations must be checked and approved by the Structural Designer!

Forces, displacements and rotations at Ultimate Limit State
 Max. vertical load (NSd,max) Fz,max = 4104,0 kN
 Min. vertical load (NSd,min) Fz,min = 60,0 kN
 Max. displ. along x-axis (dxd,max) dx,max = 20 mm
 Max. displ. along y-axis (dyd,max) dy,max = 10 mm
 Max. rotation around x-axis (αxd,max) rx,max = 0,0000 rad
 Max. rotation around y-axis (αyd,max) ry,max = 0,0106 rad

Forces, displacements and rotations at Seismic Ultimate Limit State
 Max. vertical load (NEd,max) Fz,max = 1628,0 kN
 Min. vertical load (NEd,min) Fz,min = 564,0 kN
 Max. displ. along x-axis (dxEd) dx,max = 43 mm
 Max. displ. along y-axis (dyEd) dy,max = 31 mm
 Pure seismic displ. component along x-axis (dxbd) dx,bd = 52 mm
 Pure seismic displ. component along y-axis (dybd) dy,bd = 17 mm
 Max. rotation around x-axis (αxEd,max) rx,max = 0,0030 rad
 Max. rotation around y-axis (αyEd,max) ry,max = 0,0058 rad

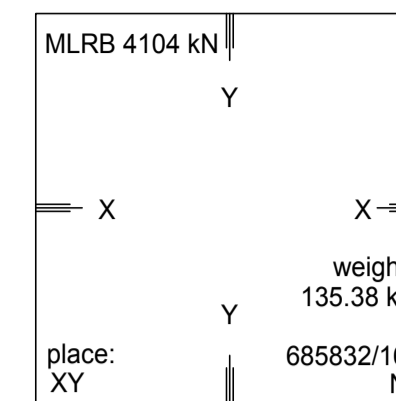
Equivalent damping factor at dbd ξb (dxy=dxy, bd) = 16 % ca.
 Effective horiz. stiffness at dbd Kb (dxy=dxy, bd) = 2,5 kN/mm ca.
 Form factor S = 12,3 --

Max. horizontal force Fxy,max = 215 kN

The Structural Designer must verify the connections to the structure

Friction coefficients:
 - superstructure (steel) μd = 0,2
 - substructure (concrete) μd = 0,5

Bearing marking



BA	Nr	XY
1	1	VI10-SA/SX
1	2	VI10-SA/CN
1	3	VI10-SA/DX
1	4	VI10-SB/SX
1	5	VI10-SB/CN
1	6	VI10-SB/DX

CORROSION PROTECTION
 - Shot blasting → SA 3
 - Zink thermal spraying → 100 μm
 - Micaceous iron oxide DB 704 → 180 μm

Only shot blasting:
 - Surfaces against concrete parts of the structure (up to 50mm from the border)
 Zink thermal spraying
 - Surfaces in contact between pad and bearing plates (up to 20mm from the pad border)
 - Surfaces against steel parts of the structure

NO. OF BEARINGS
 - 22 pcs.

INSTALLATION PLACE

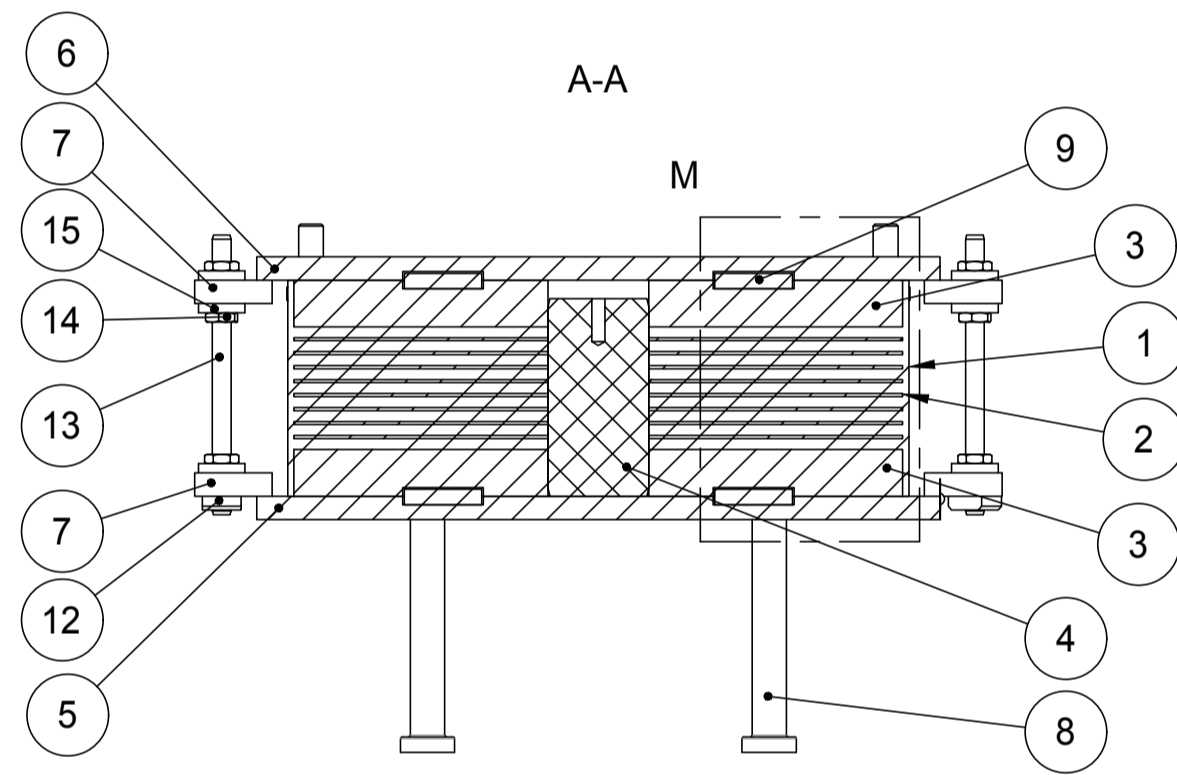
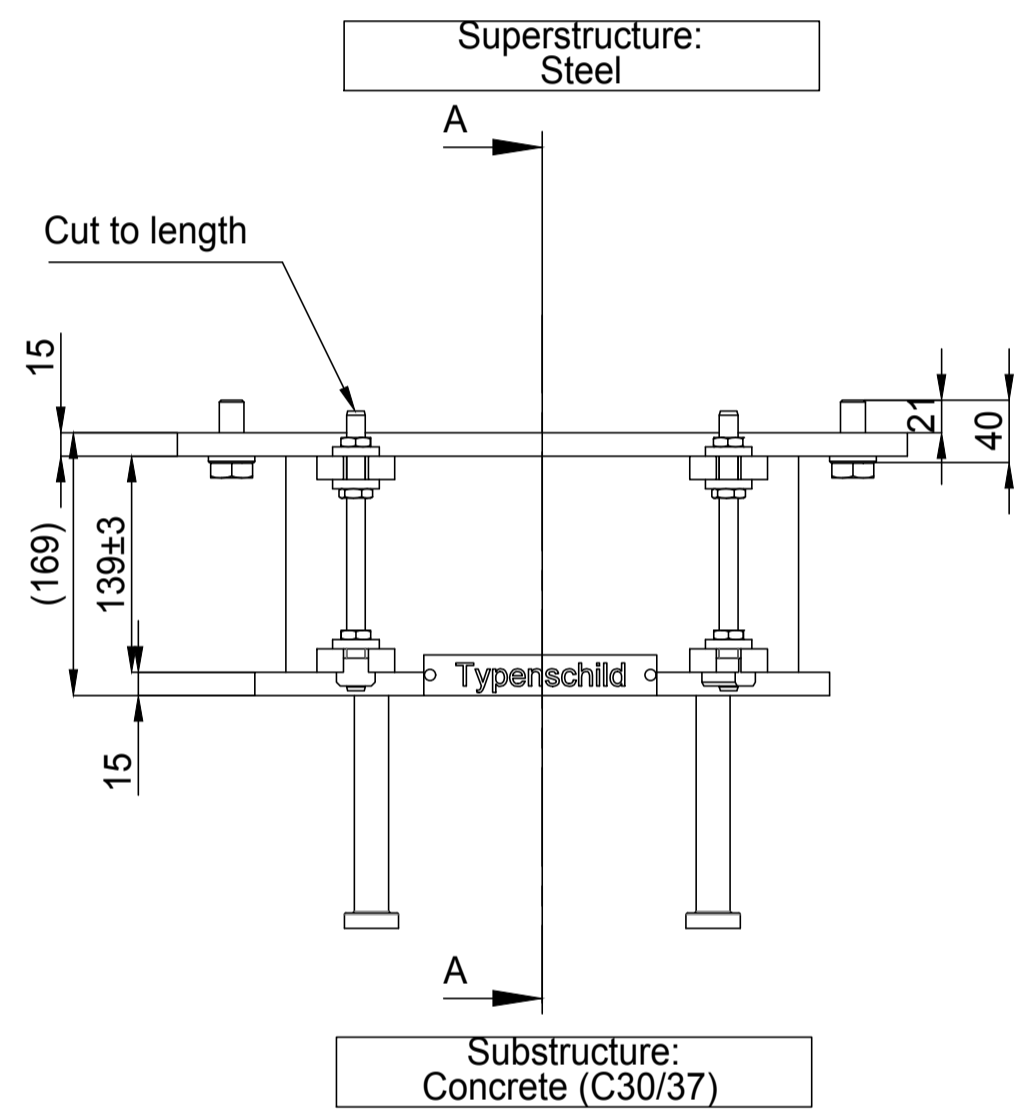
V10-SA/SX; V10-SA/CN; V10-SA/DX; V10-SB/SX; V10-SB/CN; V10-SB/DX; V04-SAF/A; V04-SAF/B; V04-SAF/C; V04-SAF/D; V04-P1F/A; V04-P1F/B; V04-P1F/C; V04-P1F/D; V04-P2F/A; V04-P2F/B; V04-P2F/C; V04-P2F/D; V04-SBF/A; V04-SBF/B; V04-SBF/C; V04-SBF/D

WORKSHOP

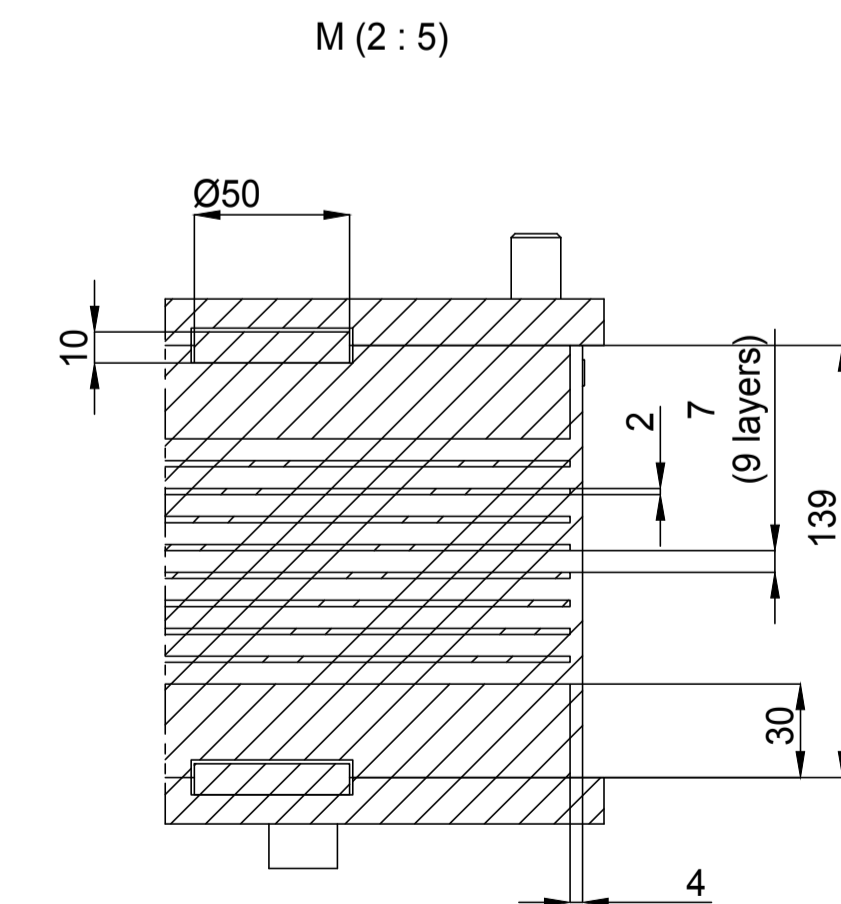
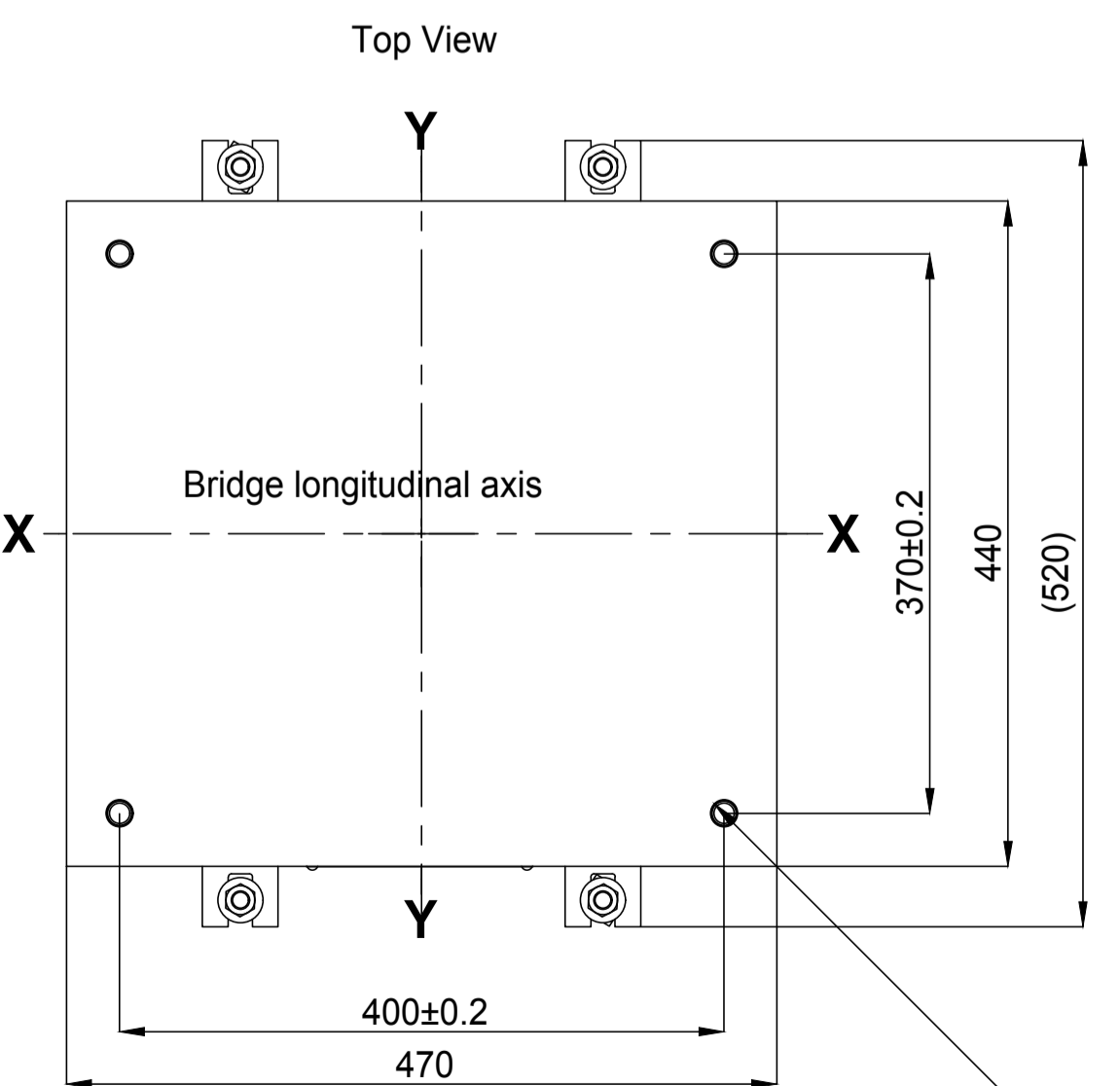
- Lager mit Typenschild / Bearing with name plate
 - ZBH-Teile rot markieren / Lock parts red marked
 - Schweißnähte gemäß DIN EN ISO 5817 Bewertungsgruppe B; Schweißnähte des ZBH Bewertungsgruppe C; Schweißnähte a=4mm, soweit nicht anders bezeichnet / Welds acc. to DIN EN 5817 Category B; welds of lock system Category C; fillet welds a4 when not otherwise indicated
 - X,Y-Achse Stirnseitig am Lagerober-/unterteil markiert / Axes X and Y marked on the top and bottom surface of the bearing
 - Schrauben mit MoS2 geschmiert / Bolts lubricated with MoS2

SITE

- Eibau nach EN 1337 and EN 15129 / Installation acc. to EN 1337 and EN 15129
 - Lager waagrecht einbauen (max. Neigung in jeder Richtung 5%) / Install the bearing horizontally (max. slope in each direction 5%)
 - Sobald die Lagerplatten an der Struktur fest verbunden sind, ZBH-Teile entfernen / As soon as both plates are rigidly connected to the structure, remove the lock parts (red marked)



LO = loose delivered



4 Ø18 for HDG Screw EN 14399-4 M16-10.9 (not in scope of supply)

Bill of materials								
PosNr	Pieces	Description	raw dimensions	Material	Certificate	Standard	Part-number	Notes
1	1	Elastomer	330x 400x 139	MEN - RB1			---	
2	8	Reinforcing steel plate	BI 2x 392x 322	S355MC	3.1		---	
3	2	Reinforcing slab	BI 30x 322x 392	S355J2+N	3.1		---	
4	1	Lead core	Rd 65x 127	Pure lead	3.1		---	
5	1	Bottom bearing plate	BI 15x 440x 370	S355J2+N	3.1		---	
6	1	Top bearing plate	BI 15x 440x 470	S355J2+N	3.1		---	
7	8	Auxiliary holder M12	BI 15x 50x 50	S355J2+N			202205	
8	4	Shear bolts Ø22x150		S235J2+C450			200051	
9	4	Anchor plate Ø50x10		S355J2+N	3.1		201424	
10	1	Name plate_CE		hard PVC			202188	
11	2	Round head grooved pin Ø4x 10		A4		ISO 8746	500851	
12	4	Sliding block M 12		8		DIN 508	500858	
13	4	Threaded bolts M12x180		8.8		DIN 976-1	502397	
14	12	hexagon nut M 12		4		EN ISO 4035	502231	
15	12	washer 13		4		DIN 7349	502190	

protection marks ISO 16016:
 The reproduction, distribution and utilization of this document as well as the communication of its contents to others without express authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or design.



Direzione Progettazione e Realizzazione Lavori

VARIANTE ALLA S.S. 1 "VIA AURELIA"
 Viabilità di accesso all'hub portuale di La Spezia
 Lavori di costruzione della variante alla S.S. 1 Via Aurelia - 3°Lotto
 2° Stralcio Funzionale B dallo Svincolo di Buon Viaggio allo Svincolo di San Venerio
COMPLETAMENTO

PRECEDENTI LIVELLI DI PROGETTAZIONE DELL'APPALTO INTEGRATO ORIGINALE

PD n°1861 del 09/07/03 aggiornato al 10/12/08 - Delibera CIPE n°60 del 02/04/08
 PE n° 103 del 14/07/2011 - D.A. CDG-103321-P del 20/07/11
 PVT n°112 del 21/01/16 aggiornata al 28/10/16 - D.A. CDG-92950-P del 21/02/17
 Progetto Esecutivo Cantierabile Opere da Completare

PROGETTO ESECUTIVO

COD. GE266

PROGETTAZIONE: ANAS - DIREZIONE PROGETTAZIONE E REALIZZAZIONE LAVORI

PROGETTISTA:
 Dott. Ing. Antonio Scalamanfrè
 Ordine Ing. di Frasimone n. 106.3

IL GEOLOGO
 Dott. Geol. Flavio Capozucca
 Ordine Geol. del Lazio n. 1599

COORDINATORE DELLA SICUREZZA IN FASE DI PROGETTAZIONE
 Geom. Emiliano Paiella

VISTO IL RESPONSABILE DEL PROCEDIMENTO
 Dott. Ing. Fabrizio Cardone

PROTOCOLLO DATA

OPERE D'ARTE MAGGIORI - VIADOTTI
ASSE PRINCIPALE - VIADOTTO SAN VENERIO I
 DISPOSITIVO DI APPOGGIO BI-16

CODICE PROGETTO	NOME FILE	REVISIONE	SCALA
PROGETTO: DPGE0266 LIV. PROG: E 20	P00V101STRDC02A	A	1:50
ELAB. P00V101STRDC02			
D			
C			
B			
A	Emissione	Luglio 2020	Ing. Ing. Ing.
REV.	DESCRIZIONE	DATA	REDATTO VERIFICATO APPROVATO