

## MECHANICAL / STRUCTURAL BEARINGS

### GRANOR® Structural Bearings – “Series D”

#### Applications

The Series “D” Structural Slide Bearings are a variation of the GRANOR® Series “B” Type.

Series “DBA” - Utilizes a GRAFAB® / GRAFLON® PTFE / Stainless Steel sliding interface for a simple, economical cast in-situ point load bearing. Sometimes used in conjunction with GRANOR® Slipjoint.

Series “DBAP” - The addition of a top Mild Steel Galvanized plate, complete with either grout bolts for in-situ pour, or studs for bolting, provides versatility of installation options.

#### STRUCTURAL BEARINGS –

##### Series “DBA”

Developed from the standard Granor Slipjoint, Series “DBA” & “DBAP” Bearings are designed to accommodate point loadings as typically used on columns or rebates or corbels supporting a beam.

(The Series “DBA” bearings are generally regarded as a heavy duty, point load, Slipjoint.)

##### Design / Manufacture –

Construction is similar to the Slipjoint, except that a fabric reinforced synthetic elastomeric pad is used as the load carrying medium. Pure Grade 1 Graflon PTFE, is bonded to the Grafab Pad via an intermediate reinforcement layer, thus providing a low friction sliding interface. The GRAFLON slides against polished stainless steel, Gr. 316 to AS – 1449 having a surface finish of  $\leq 0.15$  RMA.

##### Dimensions –

Plan Sizes shown are typical. Alternative plan sizes are available to fit project specific requirements. Polystyrene surrounds should be adjusted by the contractor to completely cover the plan area of the rebate or top of column.

##### Slide Capacity –

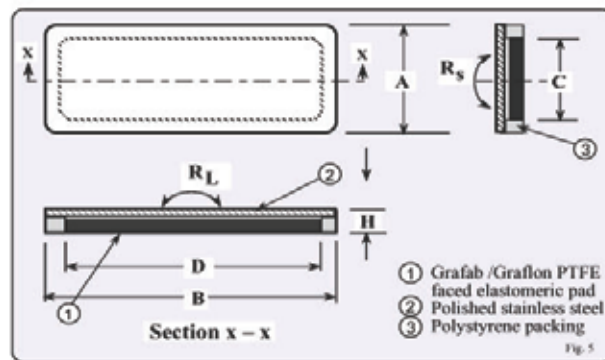
Standard movements shown of  $\pm 25$  mm in any direction from the neutral position. Alternative movement capacities are available. Part number should be changed to reflect the required non standard movement capacities.

#### STRUCTURAL BEARINGS –

##### Series “DBAP” –

The Series “DBAP” are identical in performance to the “DBA” series but by the addition of a mild steel plate, complete with either grout bolts, or studs, to back up the polished stainless steel plate, they are suitable for a broader range of applications.

Part Number Series DBA	Working Load kN	Top Plate A x B mm	Pad Size C x D mm	Rotation Radians		Bearing Height Hmm
				$R_S$	$R_L$	
DBA-100-25/25	100	130 x 175	80 x 125	0.031	0.020	18
DBA-150-25/25	150	150 x 200	100 x 150	0.025	0.017	18
DBA-200-25/25	200	170 x 215	120 x 165	0.021	0.015	18
DBA-250-25/25	250	190 x 230	140 x 180	0.023	0.018	24
DBA-300-25/25	300	200 x 250	150 x 200	0.021	0.016	24
DBA-350-25/25	350	205 x 275	155 x 225	0.021	0.014	24
DBA-400-25/25	400	215 x 290	165 x 240	0.019	0.013	24
DBA-450-25/25	450	225 x 310	175 x 260	0.032	0.022	30
DBA-500-25/25	500	230 x 330	180 x 280	0.032	0.020	30
DBA-550-25/25	550	235 x 350	185 x 300	0.031	0.019	30
DBA-600-25/25	600	250 x 350	200 x 300	0.028	0.019	30

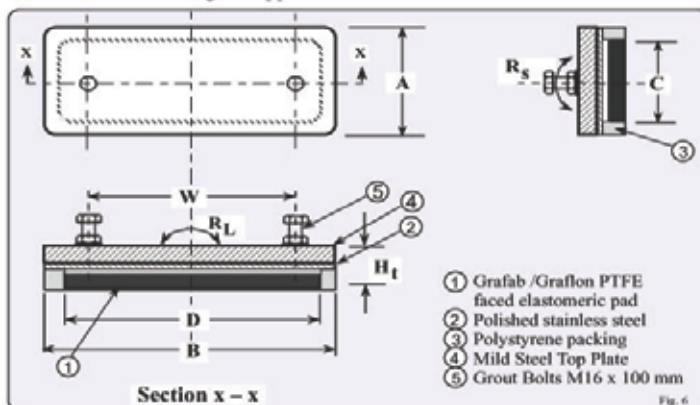


Series “DBA” Structural Slide Bearings

##### Series “DBA”

##### Part Number Identification –

DBA – Series designation  
300 – kN per bearing – working load  
25/25 – Translational movement.



Series “DBAP” Structural Slide Bearings

##### Series “DBAP” Structural Bearings

##### Application –

The addition of a mild steel top plate permits a bolted or stud connection to the superstructure. Alternatively, the grout bolts will provide a positive retention into the concrete.

##### Part Number Identification –

The addition of the “P” after “DBA” will ensure that a 16mm thick, Mild Steel top plate becomes part of the bearing.

Bolt centres are fixed at 70% of length of bearing.

Bolt size – M16 x 100 mm Gr. 8.8 Galvanised.

Note –  $H_t = H + 16$ mm in above table.

$W = 0.7 \times B$  from above table.