

# EMN

Data sheet - rev. 1.0

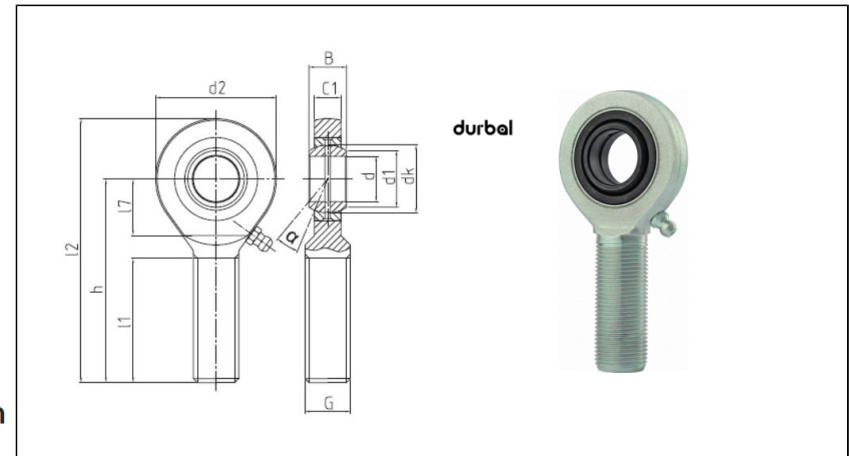
## Rod Ends - Classic Line

Rod ends with pressed spherical-plain bearing, male thread, series E/EH, DIN ISO 12240-4, maintenance required

## FEATURES AND ADVANTAGES

- **HOUSING:** C45 forged steel, tempered, surface galvanized, free of Cr VI
- **OUTER RING:** ball bearing steel, hardened, ground, phosphated, from size 15 with single split, oil groove and drill holes
- **JOINT BALL:** 100Cr6 ball bearing steel, hardened, ground, phosphated
- **MAINTENANCE:** maintenance required, oiled on delivery, initial lubrication by the user
- **GREASE NIPPLE:** DIN 3405 D1/A (sizes 15 to 17), DIN 71 412 H1 (sizes 20 to 70), further grease nipple see on this page
- **TOLERANCES:** see on this page
- **TEMPERATURE RANGE:** -40° C to +200° C
- **USE & MAINTENANCE :** [see this page](#)
- **STATIC LOAD SERVICE LIFE :** [see this page](#)
- **TOLERANCES :** [see this page](#)

## COMPONENTS AND DIMENSIONS



| Type              |                   | Measurements [mm] |         |    |    |      |    |     |    |    |      |       |       |    |    |   |       | Tilt angle                            | Rotational speed limit | Axial factor | Basic load rating |              | Radial clearance | Weight |
|-------------------|-------------------|-------------------|---------|----|----|------|----|-----|----|----|------|-------|-------|----|----|---|-------|---------------------------------------|------------------------|--------------|-------------------|--------------|------------------|--------|
| Right hand thread | Left hand thread  | d                 | G       | B  | C1 | h/h1 | d1 | d2  | d3 | d4 | dk   | l1/l3 | l2/l4 | l5 | l7 | W | α (°) | n <sub>max</sub> (min <sup>-1</sup> ) | Y                      | Y0           | dyn C (kN)        | stat C0 (kN) | CN (µm)          | kg     |
| EMN 06 - 20 - 501 | EMN 06 - 20 - 502 | 6                 | M6      | 6  | 4  | 36   | 8  | 20  | -  | -  | 10   | 22    | 46    | -  | 11 | - | 13    | -                                     | -                      | -            | 2.5               | 6            | 32-68            | 0.02   |
| EMN 08 - 20 - 501 | EMN 08 - 20 - 502 | 8                 | M8      | 8  | 5  | 42   | 10 | 23  | -  | -  | 13   | 25    | 53.5  | -  | 12 | - | 15    | -                                     | -                      | -            | 4.2               | 11           | 32-68            | 0.03   |
| EMN 10 - 20 - 501 | EMN 10 - 20 - 502 | 10                | M10     | 9  | 6  | 48   | 13 | 28  | -  | -  | 16   | 29    | 62    | -  | 15 | - | 12    | -                                     | -                      | -            | 6.4               | 17.6         | 32-68            | 0.05   |
| EMN 12 - 20 - 501 | EMN 12 - 20 - 502 | 12                | M12     | 10 | 7  | 54   | 15 | 32  | -  | -  | 18   | 33    | 70    | -  | 15 | - | 11    | -                                     | -                      | -            | 9.2               | 22.9         | 32-68            | 0.09   |
| EMN 15 - 20 - 501 | EMN 15 - 20 - 502 | 15                | M14     | 12 | 9  | 63   | 18 | 38  | -  | -  | 22   | 36    | 82    | -  | 18 | - | 8     | -                                     | -                      | -            | 13.4              | 35.2         | 40-82            | 0.14   |
| EMN 17 - 20 - 501 | EMN 17 - 20 - 502 | 17                | M16     | 14 | 10 | 69   | 20 | 44  | -  | -  | 25   | 40    | 91    | -  | 23 | - | 10    | -                                     | -                      | -            | 19.2              | 38.1         | 40-82            | 0.19   |
| EMN 20 - 20 - 501 | EMN 20 - 20 - 502 | 20                | M20x1.5 | 16 | 12 | 78   | 24 | 51  | -  | -  | 29   | 47    | 103.5 | -  | 25 | - | 10    | -                                     | -                      | -            | 25.2              | 52.2         | 40-82            | 0.31   |
| EMN 25 - 20 - 501 | EMN 25 - 20 - 502 | 25                | M24x2   | 20 | 16 | 94   | 29 | 62  | -  | -  | 35.5 | 57    | 125   | -  | 32 | - | 9     | -                                     | -                      | -            | 42.4              | 86.5         | 30-100           | 0.56   |
| EMN 30 - 20 - 501 | EMN 30 - 20 - 502 | 30                | M30x2   | 22 | 18 | 110  | 34 | 70  | -  | -  | 40.7 | 66    | 145   | -  | 35 | - | 7     | -                                     | -                      | -            | 54                | 112          | 30-100           | 0.89   |
| EMN 35 - 20 - 501 | EMN 35 - 20 - 502 | 35                | M36x3   | 25 | 20 | 140  | 39 | 82  | -  | -  | 47   | 92    | 181   | -  | 38 | - | 6     | -                                     | -                      | -            | 70.4              | 146.6        | 30-100           | 1.4    |
| EMN 40 - 21 - 501 | -                 | 40                | M39x3   | 28 | 22 | 150  | 45 | 92  | -  | -  | 53   | 99    | 196   | -  | 42 | - | 7     | -                                     | -                      | -            | 86                | 179.4        | 40-120           | 1.72   |
| EMN 40 - 20 - 501 | EMN 40 - 20 - 502 | 40                | M42x3   | 28 | 22 | 145  | 45 | 92  | -  | -  | 53   | 94    | 191   | -  | 42 | - | 7     | -                                     | -                      | -            | 86                | 179.4        | 40-120           | 1.8    |
| -                 | EMN 40 - 24 - 502 | 40                | M39x3   | 28 | 22 | 150  | 45 | 92  | -  | -  | 53   | 99    | 196   | -  | 42 | - | 7     | -                                     | -                      | -            | 86                | 179.4        | 40-120           | 1.72   |
| EMN 45 - 20 - 501 | EMN 45 - 20 - 502 | 45                | M45x3   | 32 | 25 | 165  | 50 | 102 | -  | -  | 60   | 100   | 216   | -  | 50 | - | 7     | -                                     | -                      | -            | 107               | 230.8        | 40-120           | 2.6    |
| EMN 45 - 21 - 501 | EMN 45 - 21 - 502 | 45                | M42x3   | 32 | 25 | 163  | 50 | 102 | -  | -  | 60   | 98    | 214   | -  | 50 | - | 7     | -                                     | -                      | -            | 107               | 230.8        | 40-120           | 2.5    |
| EMN 50 - 21 - 501 | EMN 50 - 21 - 502 | 50                | M45x3   | 35 | 28 | 185  | 55 | 112 | -  | -  | 66   | 110   | 241   | -  | 60 | - | 6     | -                                     | -                      | -            | 132               | 280.8        | 40-120           | 3.28   |
| EMN 50 - 20 - 501 | EMN 50 - 20 - 502 | 50                | M52x3   | 35 | 28 | 195  | 55 | 112 | -  | -  | 66   | 120   | 251   | -  | 60 | - | 6     | -                                     | -                      | -            | 132               | 280.8        | 40-120           | 3.4    |
| EMN 60 - 20 - 501 | EMN 60 - 20 - 502 | 60                | M60x4   | 44 | 36 | 225  | 66 | 135 | -  | -  | 80   | 140   | 292.5 | -  | 70 | - | 6     | -                                     | -                      | -            | 208               | 437.3        | 40-120           | 5.9    |
| EMN 60 - 21 - 501 | EMN 60 - 21 - 502 | 60                | M52x3   | 44 | 36 | 210  | 66 | 135 | -  | -  | 80   | 125   | 277.5 | -  | 70 | - | 6     | -                                     | -                      | -            | 208               | 437.3        | 40-120           | 5.76   |
| EMN 70 - 20 - 501 | EMN 70 - 20 - 502 | 70                | M72x4   | 49 | 40 | 265  | 77 | 162 | -  | -  | 92   | 140   | 346   | -  | 88 | - | 6     | -                                     | -                      | -            | 315               | 619.8        | 72-142           | 11.75  |

| Type              |                   | Measurements<br>[mm] |       |    |    |      |    |     |    |    |    |       |       |    |    |   | Tilt<br>angle | Rotational<br>speed limit             | Axial<br>factor |    | Basic<br>load rating |              | Radial<br>clearance | Weight |
|-------------------|-------------------|----------------------|-------|----|----|------|----|-----|----|----|----|-------|-------|----|----|---|---------------|---------------------------------------|-----------------|----|----------------------|--------------|---------------------|--------|
| Right hand thread | Left hand thread  | d                    | G     | B  | C1 | h/h1 | d1 | d2  | d3 | d4 | dk | l1/l3 | l2/l4 | l5 | l7 | W | α (°)         | n <sub>max</sub> (min <sup>-1</sup> ) | Y               | Y0 | dyn C (kN)           | stat C0 (kN) | CN (µm)             | kg     |
| EMN 70 - 21 - 501 | EMN 70 - 21 - 502 | 70                   | M56x4 | 49 | 40 | 235  | 77 | 162 | -  | -  | 92 | 130   | 316   | -  | 88 | - | 6             | -                                     | -               | -  | 315                  | 619.8        | 72-142              | 9      |

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