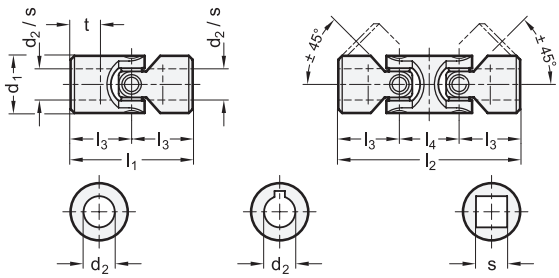
# Universal Joints with Needle Bearing

Single or Double




**2 Bore code**

**B** Without keyway
**K** With keyway
**V** With square

**5 Type**

**EW** Single, needle bearing
**DW** Double, needle bearing

| 1 $d_1$ | 3 $d_2$ H7 Bore | 3 **s** H10 Square | 4 $l_1$ Type EW | 4 $l_2$ Type DW | $l_3$ | $l_4$ | **t** +1 Max. assembly length of the shaft | |
|---|---|---|---|---|---|---|---|---|
| 22 | 10 | V 10* | 48 | 74 | 24 | 26 | 12 | Permissible r.p.m. / torque / Determining the size → *Page 1645* |
| 22 | 12 | V 10* | 62 | 88 | 31 | 26 | 18 | |
| 25 | 12 | V 12* | 56 | 86 | 28 | 30 | 13 | |
| 25 | 16 | V 12* | 74 | 104 | 37 | 30 | 21 | |
| 28 | 14 | V 14* | 60 | 96 | 30 | 36 | 13 | |
| 32 | 16 | V 16* | 68 | 105 | 34 | 37 | 16 | |
| 32 | 20 | V 16* | 86 | 124 | 43 | 38 | 24 | |
| 36 | 18 | V 18* | 74 | 114 | 37 | 40 | 17 | |
| 42 | 20 | V 20* | 82 | 128 | 41 | 46 | 18 | |
| 42 | 25 | V 20* | 108 | 156 | 54 | 48 | 31 | |
| 45 | 22 | V 22* | 95 | 145 | 47,5 | 50 | 22 | |
| 50 | 25 | V 25* | 108 | 163 | 54 | 55 | 26 | |
| 50 | 30 | V 25* | 132 | 188 | 66 | 56 | 38 | |
| 58 | 30 | V 30* | 122 | 190 | 61 | 68 | 29 | |
| 58 | 32 | V 30* | 130 | 198 | 65 | 68 | 33 | |
| 70* | 35 | V 35 | 140 | 212 | 70 | 72 | 35 | |

* not available from stock, requires a minimum order quantity

## Specification

- Steel
  Plain
- Joint bearing areas, pins
  Case-hardened
- *Keyway JS9 DIN 6885 → Page 2078*
- *Cross Holes GN 110.1 → Page 2081*
- *ISO Fundamental Tolerances → Page 2151*
- RoHS

### On request

- With other or unequal bores

## Information

The permissible r.p.m. of universal joints with needle bearings DIN 808 is higher than for those with friction bearings, but is still dependent on the load, duration of use as well as angular disposition. Ideal applications allow speeds of up to 4000 r.p.m → *Page 1645.*

Needle bearings give the universal joints at 3° to 5° angular disposition a considerably higher degree of efficiency than those fitted with friction bearings. The needle bearings have a permanent lubrication and thus do not require servicing. Information regarding the selection of universal joints with needle bearing.

How to order

1 2 3 4 5
**DIN 808-50-B 25-163-DW**

| | |
|---|---|
| 1 | $d_1$ |
| 2 | Bore code |
| 3 | $d_2$ (s) |
| 4 | $l_2$ ($l_1$) |
| 5 | Type |