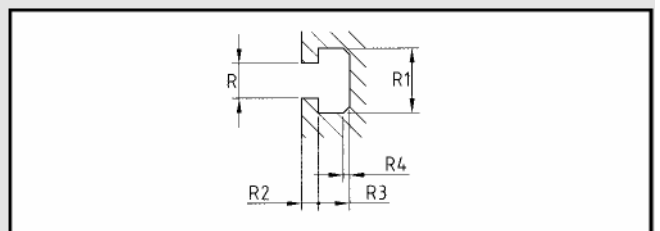
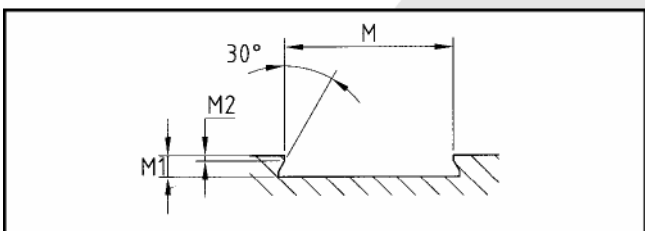
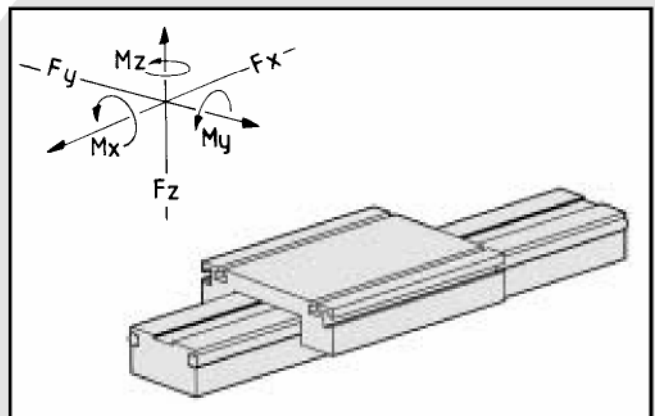
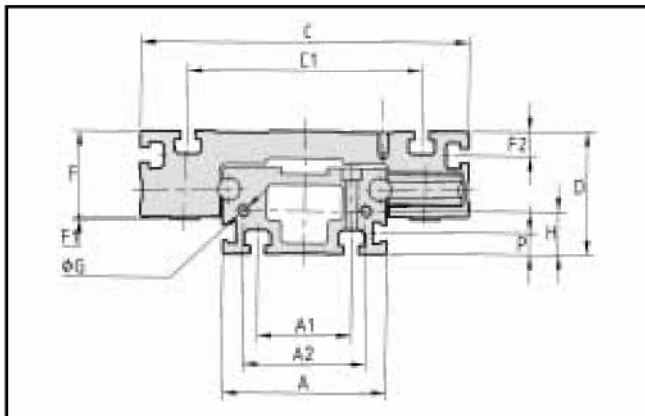
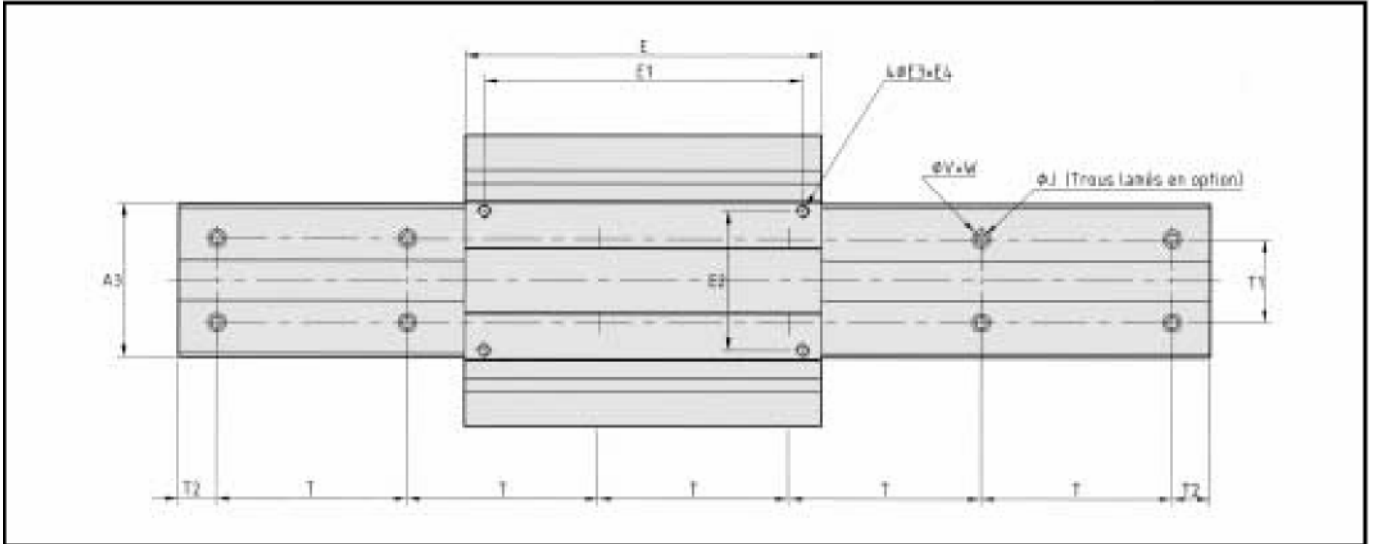
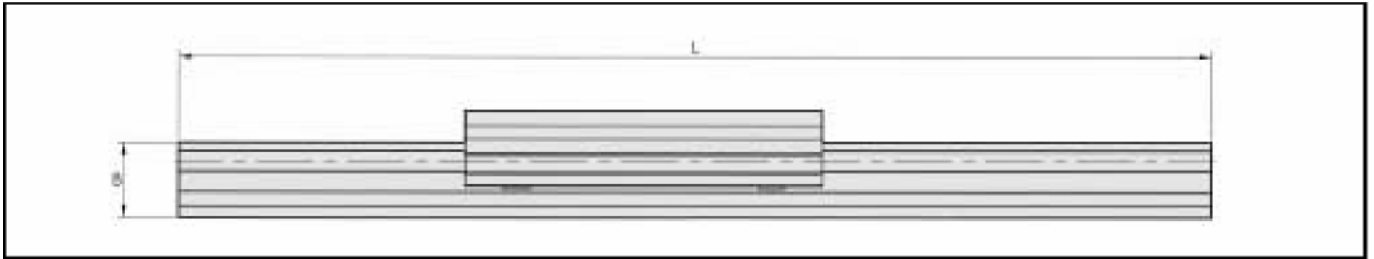




## LIGAL SERIES

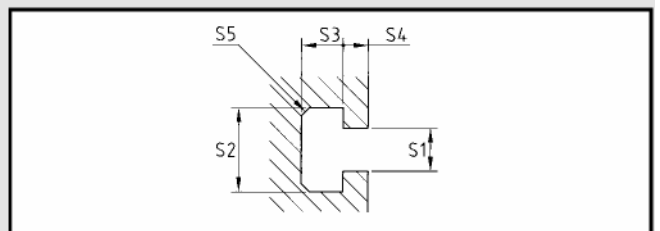
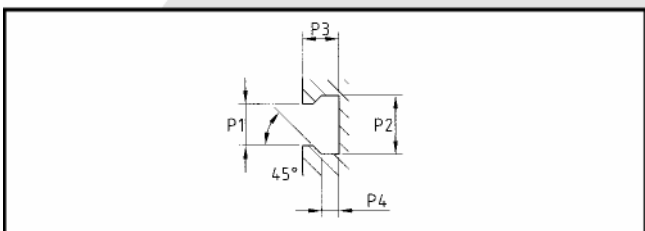
*International name: KLI*

- **Without drive**
- **Roller guide with 4 or 8 bearings**
- **Guide without clearance**
- **Pre-loaded guide factory adjusted (no eccentric)**
- **Profiles made of anodised extruded aluminium**
- **Additional tapped holes on customer's request**
- **Lateral slots for mounting parts or accessories**



Centre slot of the profile

Slot of the profile



Lateral slot of the profile

T-slot of the carriage

### DIMENSIONS (mm)

| Series    | Maximum length | A   | A1 | A2 | A3  | B  | C   | C1  | D  | E   | E1  |
|-----------|----------------|-----|----|----|-----|----|-----|-----|----|-----|-----|
| LIGAL 62  | 7,000          | 62  | 32 | 46 | 62  | 34 | 100 | 66  | 50 | 120 | 100 |
| LIGAL 90  | 7,000          | 90  | 50 | 66 | 90  | 48 | 165 | 108 | 73 | 200 | 176 |
| LIGAL 115 | 6,000          | 115 | 66 | 86 | 115 | 60 | 230 | 164 | 85 | 280 | 250 |

| Series    | E2  | E3  | E4 | F  | F 1 | F2 | G  | H  | M  | M1 | M2 | P  | P 1 |
|-----------|-----|-----|----|----|-----|----|----|----|----|----|----|----|-----|
| LIGAL 62  | 38  | M6  | 15 | 32 | 2   | 10 | M6 | 17 | 20 | 4  | 1  | 8  | 6   |
| LIGAL 90  | 62  | M8  | 18 | 52 | 3   | 15 | M6 | 24 | 25 | 4  | 1  | 11 | 7   |
| LIGAL 115 | 110 | M10 | 18 | 60 | 3.5 | 17 | M8 | 30 | 32 | 4  | 1  | 14 | 11  |

| Series    | P2 | P3 | P4  | R  | R1   | R2 | R3  | R4  | S1   | S2   | S3  | S4 | S5 |
|-----------|----|----|-----|----|------|----|-----|-----|------|------|-----|----|----|
| LIGAL 62  | 8  | 6  | 2.5 | 6  | 10.5 | 4  | 6.5 | 1.5 | 5.2  | 10.5 | 4.5 | 3  | 1  |
| LIGAL 90  | 10 | 7  | 3   | 8  | 15.5 | 5  | 9   | 2   | 8.2  | 15.5 | 6.5 | 4  | 2  |
| LIGAL 115 | 15 | 9  | 3.5 | 10 | 18.5 | 6  | 11  | 2.5 | 10.5 | 18.5 | 10  | 6  | 2  |

#### OPTION: Bore hole view in the profile

| Series    | J   | T   | T1 | T2 <sub>min</sub> | T2 <sub>max</sub> | V  | W   |
|-----------|-----|-----|----|-------------------|-------------------|----|-----|
| LIGAL 62  | 5.5 | 100 | 32 | 15                | 85                | 9  | 5.5 |
| LIGAL 90  | 6.5 | 150 | 50 | 20                | 130               | 11 | 6.5 |
| LIGAL 115 | 8.5 | 200 | 66 | 25                | 175               | 14 | 8.5 |

**Option A80:** Attached lubrication units

### LONGER RUNNING CARRIAGES WITH 4 (ref. XL4) OR 8 ROLLERS (ref. XL8)

| LIGAL 62 |          | LIGAL 90 |          | LIGAL 115 |          |
|----------|----------|----------|----------|-----------|----------|
| E = 200  | E1 = 170 | E = 300  | E1 = 270 | E = 400   | E1 = 360 |

### TECHNICAL DATA

| Series    | Load (N) |       |       | Static moment (Nm) |     |     |
|-----------|----------|-------|-------|--------------------|-----|-----|
|           | Fx       | Fy    | Fz    | Mox                | Moy | Moz |
| LIGAL 62  | 597      | 600   | 800   | 60                 | 110 | 105 |
| LIGAL 90  | 933      | 1,500 | 2,600 | 124                | 210 | 190 |
| LIGAL 115 | 1,870    | 2,600 | 4,800 | 286                | 480 | 410 |

| Series    | Total weight            | Weight of carriage | Moment of inertia                  |                                    |
|-----------|-------------------------|--------------------|------------------------------------|------------------------------------|
|           | Kg                      | Kg                 | I <sub>yy</sub> (mm <sup>4</sup> ) | I <sub>zz</sub> (mm <sup>4</sup> ) |
| LIGAL 62  | 2.9 + (stroke x 0.004)  | 2.3                | 12.70 x 10 <sup>4</sup>            | 47.16 x 10 <sup>4</sup>            |
| LIGAL 90  | 5.9 + (stroke x 0.007)  | 4.2                | 53.32 x 10 <sup>4</sup>            | 193.09 x 10 <sup>4</sup>           |
| LIGAL 115 | 10.8 + (stroke x 0.010) | 7.9                | 130.65 x 10 <sup>4</sup>           | 475.33 x 10 <sup>4</sup>           |

### REFERENCES

|                         | LIGAL 90 | 1700/2000 | XL4 |
|-------------------------|----------|-----------|-----|
| Series                  |          |           |     |
| Stroke / Length (mm)    |          |           |     |
| Options and accessories |          |           |     |

