

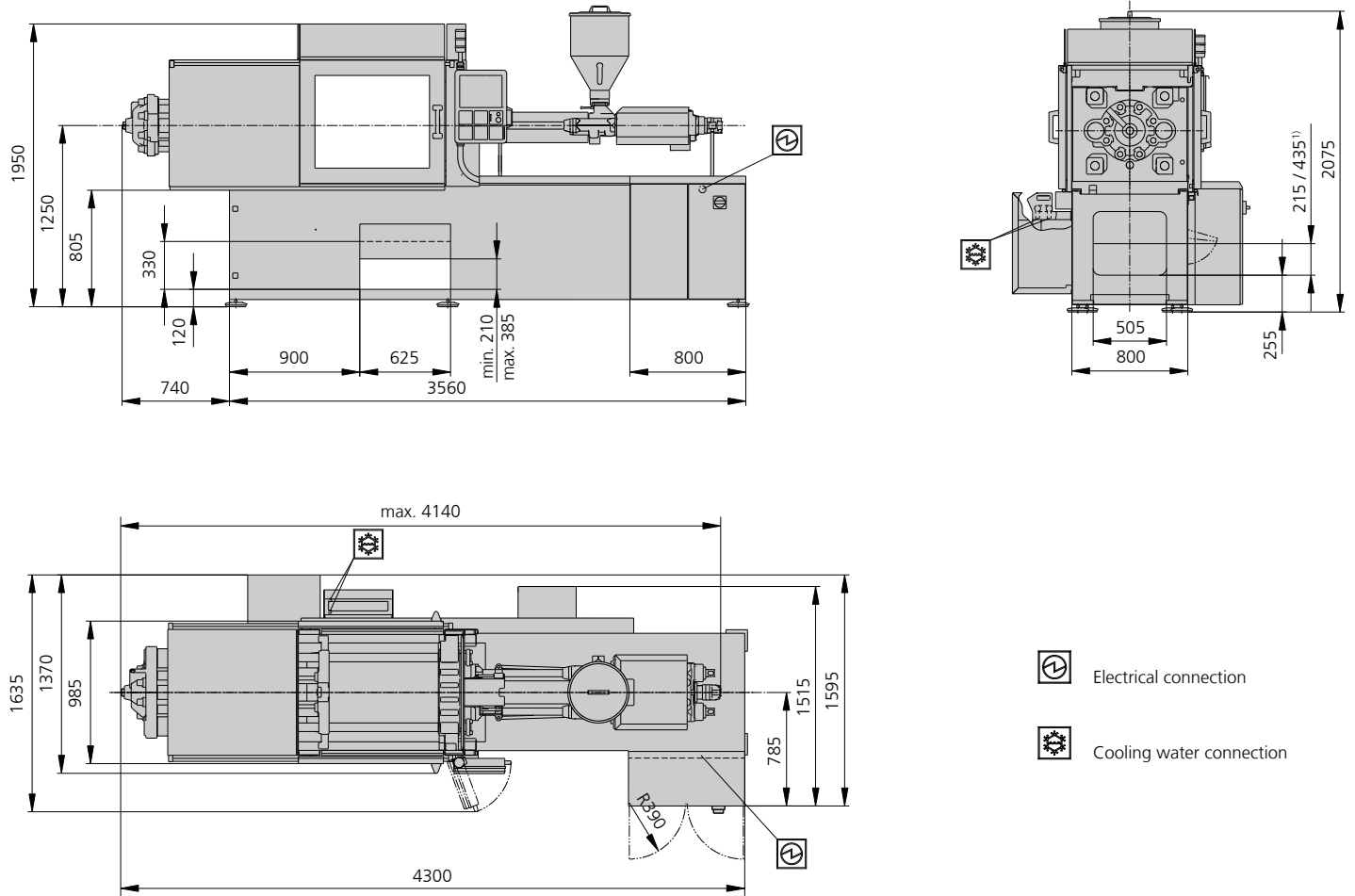
# ALLROUNDER 420 C GOLDEN EDITION

Distance between tie bars: 420 x 420 mm

Clamping force: 1000 kN

Injection unit (acc. to EUROMAP): 290

**ARBURG**



1) Conveyor belt

| Clamping unit                       |              | 420 C GOLDEN EDITION |  |  |
|-------------------------------------|--------------|----------------------|--|--|
| with clamping force                 | max. kN      | 1000                 |  |  |
| Opening force   stroke              | max. kN   mm | 250   500            |  |  |
| Mould height, fixed   variable      | min. mm      | 250   ---            |  |  |
| Platen daylight fixed   variable    | max. mm      | 750   ---            |  |  |
| Distance between tie bars (w x h)   | mm           | 420 x 420            |  |  |
| Mould mounting platens (w x h)      | max. mm      | 570 x 570            |  |  |
| Weight of movable mould half        | max. kg      | 600                  |  |  |
| Ejector force   stroke              | max. kN   mm | 40   175             |  |  |
| Dry cycle time EUROMAP <sup>2</sup> | min. s - mm  | 1,8 - 294            |  |  |

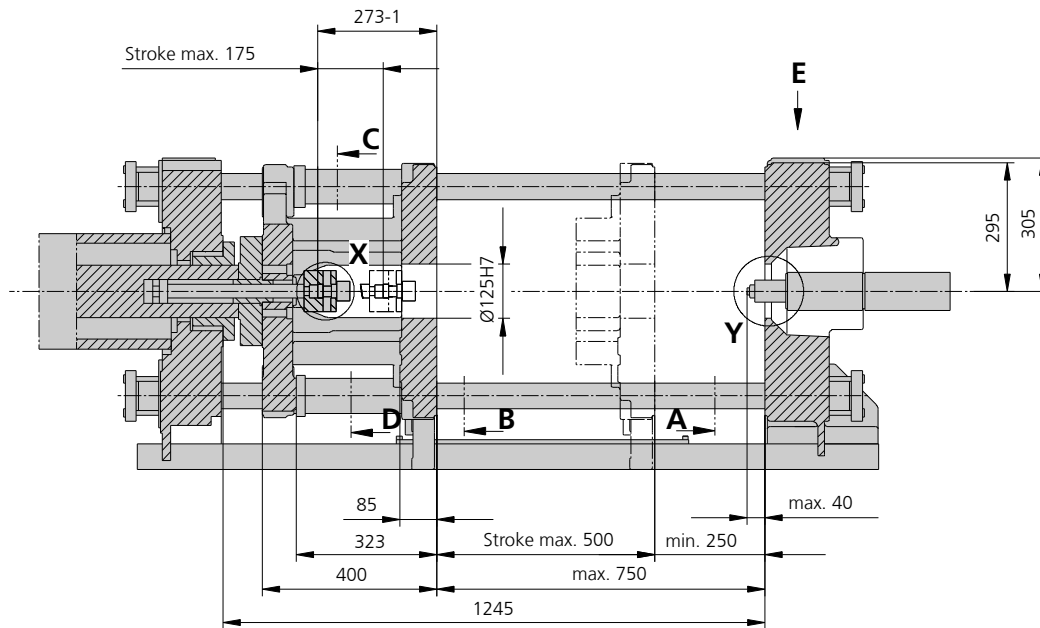
| Injection unit                           |                         | 290      |      |      |
|--|-------------------------|----------|------|------|
| with screw diameter                      | mm                      | 30       | 35   | 40   |
| Effective screw length                   | L/D                     | 23,3     | 20   | 17,5 |
| Screw stroke                             | max. mm                 | 150      |      |      |
| Calculated stroke volume                 | max. cm <sup>3</sup>    | 106      | 144  | 188  |
| Shot weight                              | max. g PS               | 97       | 132  | 172  |
| Material throughput                      | max. kg/h PS            | 17       | 20,5 | 24,5 |
|  | max. kg/h PA6.6         | 8,5      | 10,5 | 12,5 |
| Injection pressure                       | max. bar                | 2500     | 2000 | 1530 |
| Holding pressure                         | max. bar                | 2500     | 2000 | 1530 |
| Injection flow <sup>2</sup>              | max. cm <sup>3</sup> /s | 102      | 140  | 182  |
| Screw circumferential speed <sup>2</sup> | max. m/min              | 46       | 54   | 62   |
| Screw torque                             | max. Nm                 | 320      | 380  | 430  |
| Nozzle contact force   retraction stroke | max. kN   mm            | 60   240 |      |      |
| Heating capacity   zones                 | kW                      | 6,4   5  |      |      |
| Feed hopper                              | l                       | 50       |      |      |

| Drive and connection                      |             | 2 pumps     |  |  |
|---|-------------|-------------|--|--|
| with injection unit                       |             | 290         |  |  |
| Net weight of machine                     | kg          | 3650        |  |  |
| Emiss. sound press. level DIN EN 201:1997 | dB(A)       | 68 +3       |  |  |
| Oil filling                               | l           | 235         |  |  |
| Drive power <sup>2</sup>                  | max. kW     | 15          |  |  |
| Electrical connection <sup>3</sup>        | kW          | 24          |  |  |
|   | Total       | 80          |  |  |
|   | Machine     | ---         |  |  |
|   | Heating     | ---         |  |  |
| Cooling water connection                  | max. °C     | 30          |  |  |
|   | min. Δp bar | 1,5   DN 25 |  |  |

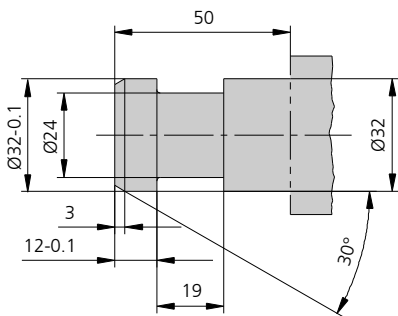
**Machine type**  
with EUROMAP size designation <sup>1</sup>  
420 C GOLDEN EDITION 1000-290

All specifications relate to the basic machine version. Deviations are possible depending on variants, process settings and material type. Depending on the drive, certain combinations, e.g. max. injection pressure and max. injection flow may be mutually exclusive.

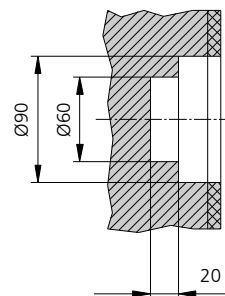
- 1) Clamping force (kN) - large injection unit = max. stroke volume (cm<sup>3</sup>) x max. injection pressure (kbar)
  - 2) Specifications depend on the drive variant / drive configuration.
  - 3) Specifications relate to 400 V/50 Hz.
- [ ] Specifications apply to alternative equipment.



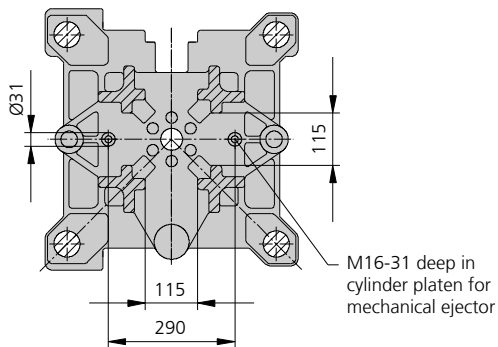
Ejector bolt | X



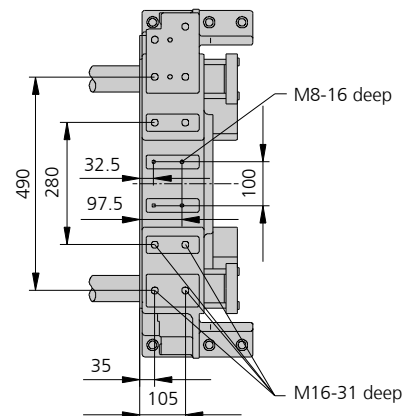
Bore in mould (if required) | Y



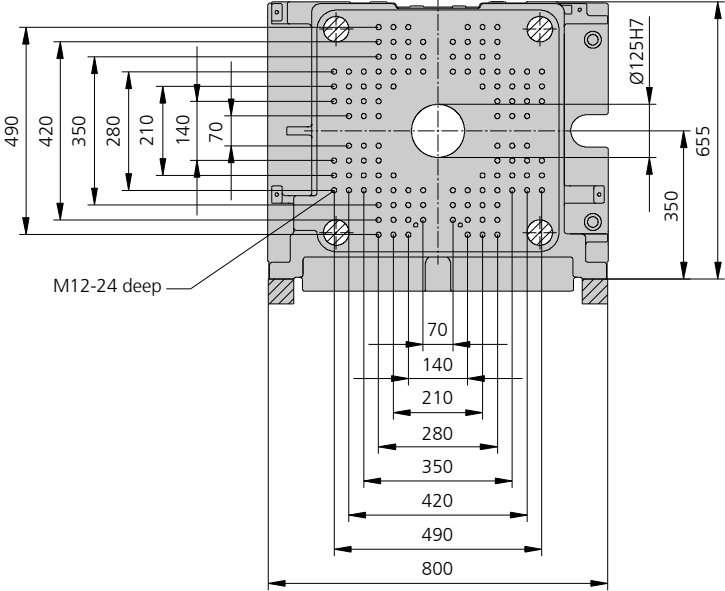
C-D view



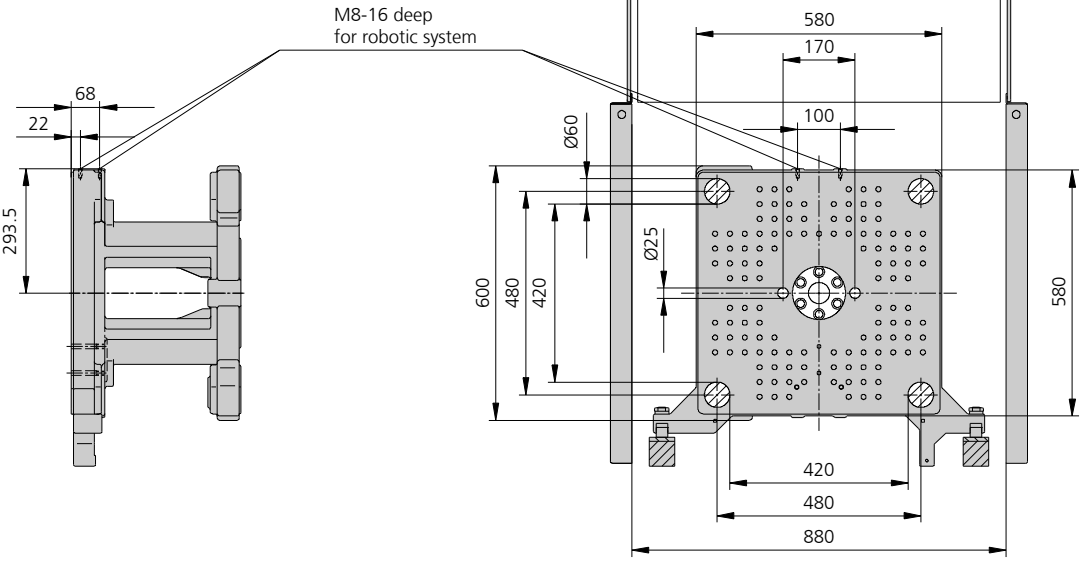
Robotic system mounting | E



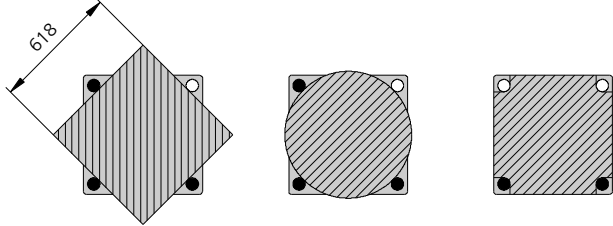
Fixed mould mounting platen | A



Moving mould mounting platen | B



Useful clamping surface when pulling the tie rods



## Theoretical shot weights for the most important injection moulding materials

| Injection units according to EUROMAP |                                      | 290 |     |     |
|--------------------------------------|--------------------------------------|-----|-----|-----|
| Screw diameter                       | mm                                   | 30  | 35  | 40  |
| Polystyrene                          | max. g PS                            | 97  | 132 | 172 |
| Styrene heteropolymerizates          | max. g SB                            | 95  | 129 | 168 |
|                                      | max. g SAN, ABS <sup>1)</sup>        | 93  | 126 | 165 |
| Cellulose acetate                    | max. g CA <sup>1)</sup>              | 109 | 148 | 194 |
| Celluloseacetobutyrate               | max. g CAB <sup>1)</sup>             | 101 | 138 | 180 |
| Polymethyl methacrylate              | max. g PMMA                          | 100 | 136 | 178 |
| Polyphenylene ether, mod.            | max. g PPE                           | 90  | 122 | 160 |
| Polycarbonate                        | max. g PC                            | 102 | 139 | 181 |
| Polysulphone                         | max. g PSU                           | 105 | 143 | 187 |
| Polyamides                           | max. g PA 6.6, PA 6 <sup>1)</sup>    | 96  | 131 | 171 |
|                                      | max. g PA 6.10, PA 11 <sup>1)</sup>  | 90  | 122 | 160 |
| Polyoximethylene (Polyacetal)        | max. g POM                           | 120 | 163 | 213 |
| Polyethylene terephthalate           | max. g PET                           | 115 | 157 | 205 |
| Polyethylene                         | max. g PE-LD                         | 73  | 100 | 130 |
|                                      | max. g PE-HD                         | 76  | 103 | 134 |
| Polypropylene                        | max. g PP                            | 77  | 105 | 137 |
| Fluoropolymerides                    | max. g FEP, PFA, PCTFE <sup>1)</sup> | 155 | 211 | 276 |
|                                      | max. g ETFE                          | 136 | 185 | 242 |
| Polyvinyl chloride                   | max. g PVC-U                         | 117 | 159 | 208 |
|                                      | max. g PVC-P <sup>1)</sup>           | 108 | 147 | 192 |

1) average value

**ARBURG GmbH + Co KG**

Postfach 11 09 · 72286 Lossburg · Tel.: +49(0)7446 33-0 · Fax: +49(0)7446 33-3365 · www.arburg.com · e-mail: contact@arburg.com

**With locations in Europe:** Germany, Belgium, Denmark, France, United Kingdom, Italy, Netherlands, Austria, Poland, Switzerland, Slovakia,Spain, Czech Republic, Turkey, Hungary | **Asia:** People's Republic of China, Indonesia, Malaysia, Singapore, Thailand, United Arab Emirates | **America:** Brazil, Mexico, USAFor more information, please go to [www.arburg.com](http://www.arburg.com).

© 2014 ARBURG GmbH + Co KG

The brochure is protected by copyright. Any utilisation, which is not expressly permitted under copyright legislation, requires the previous approval of ARBURG.

All data and technical information have been compiled with great care. However we accept no responsibility for correctness. Individual illustrations and information may deviate from the actual delivery condition of the machine. The relevant valid operating instructions are applicable for the installation and operation of the machine.

**ARBURG GmbH + Co KG**

DIN EN ISO 9001 + 14001 + 50001 certified

BLUECOMPETENCE  
Alliance MemberPartner of the Engineering Industry  
Sustainability Initiative