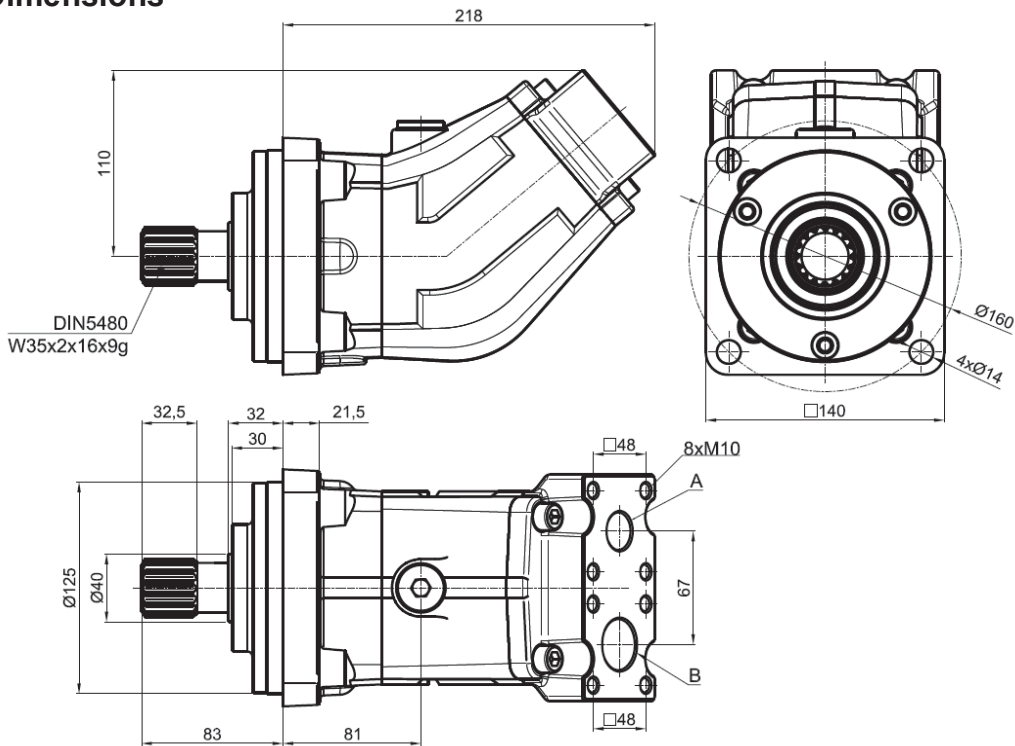




OIL-HYDRAULIC BENT PUMP  
AXIAL PISTONS

Ref. BI M IA1

Main Dimensions



(Dimensions in mm)

| Main Data                                     |            |         |         |
|-----------------------------------------------|------------|---------|---------|
| Pumps BI                                      | 50M5IA1    | 60M7IA1 | 80M7IA1 |
| Displacement (cm <sup>3</sup> /rot.)          | 50         | 60      | 81      |
| Operating pressure (bar) (up to)              | 350        | 350     | 300     |
| Peak pressure (bar)                           | 400        | 400     | 350     |
| Operating rotation <sup>1</sup> (rpm)         | 2300       | 2000    | 1500    |
| Max. rotation without load <sup>1</sup> (rpm) | 3000       | 2600    | 2000    |
| Weight (approx.) (kg)                         | 12         | 12      | 12      |
| Pistons quantity                              | 5          | 7       |         |
| A-Oil outlet (mm)                             | ø22        | ø22     | ø22     |
| B-Oil inlet (mm)                              | ø30        | ø30     | ø30     |
| C                                             | Drain Hole |         |         |

How to order:  
Example: Pump 60cm<sup>3</sup>/rot, operating pressure up to 350 bar; peak pressure 400 bar, ref. BI M IA1 → BI60M7IA1

|                                                                                                                                                           |                                                          |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
| Fluids                                                                                                                                                    | mineral oils type ISO HM or DIN 51524-2 HLP              |
| Recommended viscosity range                                                                                                                               | 20 to 40 cSt (mm <sup>2</sup> /s) at working temperature |
| Limits viscosity range                                                                                                                                    | 10 to 750 cSt (mm <sup>2</sup> /s)                       |
| Start-up viscosity range, without load                                                                                                                    | 750 to 1500 cSt (mm <sup>2</sup> /s)                     |
| Filtration                                                                                                                                                | 10µm ISO4406 18/13                                       |
| Inlet pressure range                                                                                                                                      | 0,8 to 2 bar abs                                         |
| In the application of any of these pumps; the use of these data does not exempt the reading of the instruction "BI pumps recommendations before start-up" |                                                          |

<sup>1</sup> These values are valid at an absolute pressure of 1 bar in suction port when operating with a mineral oil at a viscosity of 30 mm<sup>2</sup>/s (cSt).

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OIL-HYDRAULIC BENT PUMP  
AXIAL PISTONS

Ref. BI M IA1

Diagram  
Flow - Speed

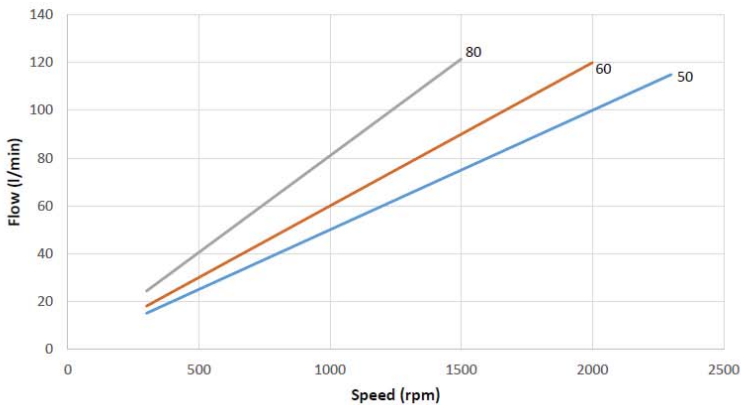
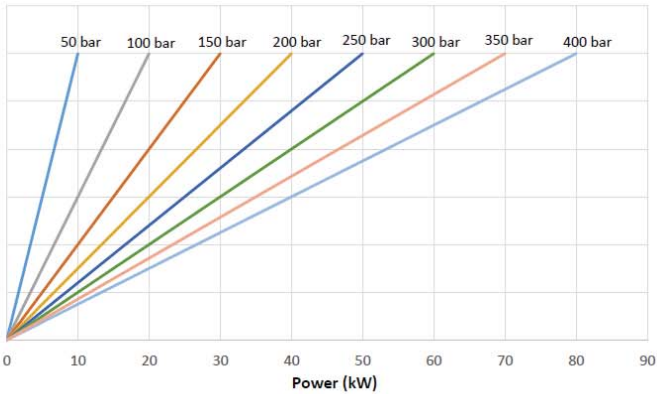


Diagram  
Input Power - Flow – Pressure



Hose dimensions

| Inlet Hose   |                               |
|--------------|-------------------------------|
| Flow (l/min) | Internal pipe diameter (inch) |
| 30-40        | 1"1/4                         |
| 50-60        | 1"1/2                         |
| 70-90        | 1"3/4                         |
| 100-120      | 2"                            |
| 130-150      | 2"1/4                         |

| Outlet Hose  |                               |         |         |         |         |
|--------------|-------------------------------|---------|---------|---------|---------|
| Flow (l/min) | Internal pipe diameter (inch) |         |         |         |         |
|              | 1/2"                          | 1/2"    | 1/2"    | 1/2"    | 1/2"    |
| 30           | 1/2"                          | 1/2"    | 1/2"    | 1/2"    | 1/2"    |
| 40           | 5/8"                          | 1/2"    | 1/2"    | 1/2"    | 1/2"    |
| 50           | 5/8"                          | 5/8"    | 5/8"    | 1/2"    | 1/2"    |
| 60           | 3/4"                          | 5/8"    | 5/8"    | 5/8"    | 5/8"    |
| 70           | 1"                            | 3/4"    | 3/4"    | 5/8"    | 5/8"    |
| 80           | 1"                            | 3/4"    | 3/4"    | 3/4"    | 3/4"    |
| 90           | 1"                            | 1"      | 1"      | 3/4"    | 3/4"    |
| 100          | 1"                            | 1"      | 1"      | 1"      | 3/4"    |
| 110          | 1"                            | 1"      | 1"      | 1"      | 1"      |
| 120          | 1"                            | 1"      | 1"      | 1"      | 1"      |
| 130          | 1"                            | 1"      | 1"      | 1"      | 1"      |
| 140          | 1"1/4                         | 1"      | 1"      | 1"      | 1"      |
| 150          | 1"1/4                         | 1"      | 1"      | 1"      | 1"      |
| P (bar)      |                               |         |         |         |         |
| 50-100       |                               | 100-150 | 150-200 | 200-300 | 300-350 |

Important notes:

- To install one of these pumps, please consult and respect the instruction “BI pumps recommendations before start-up”;
- Other axis available, please consult “Axel options”.

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