



## Datasheet

**High flow capabilities**  
for the transfer of  
large volumes

**Interchangeable  
spare parts** with  
other Azcue models to  
reduce stock holding

**Bearings greased for  
life** with bearing  
replacement at 35,000  
intervals

**Magnetic coupling on  
request** to prevent the  
leaking of a mechanical  
seal - enhances service  
life when used for  
critical applications

**Marine type  
approved** by all  
classification societies  
e.g. Lloyds/ABS

Pump is **reversible**  
on request

**Long coupled** to  
enable maintenance  
of pump head without  
removing the motor  
first



**Space saving  
vertical design** -  
smaller footprint  
than equivalent  
performing gear  
pumps

**Competitively  
priced** in the  
market compared  
to other small screw  
pumps available

Able to handle  
**lubricating fluids**  
under fluctuating  
flow, pressure and  
viscosities without  
losing efficiency

Built in **relief valve**  
for pump protection

**Additional bearing**  
in the pump head  
to share the strain  
of operation and  
increase robustness

**Manufactured in  
Spain** with materials  
from own foundry

## Series **BT-LH/LV** Triple Screw Pump – High Flow, Long Coupled

# BT-LH/LV Triple Screw Pump – High Flow, Long Coupled



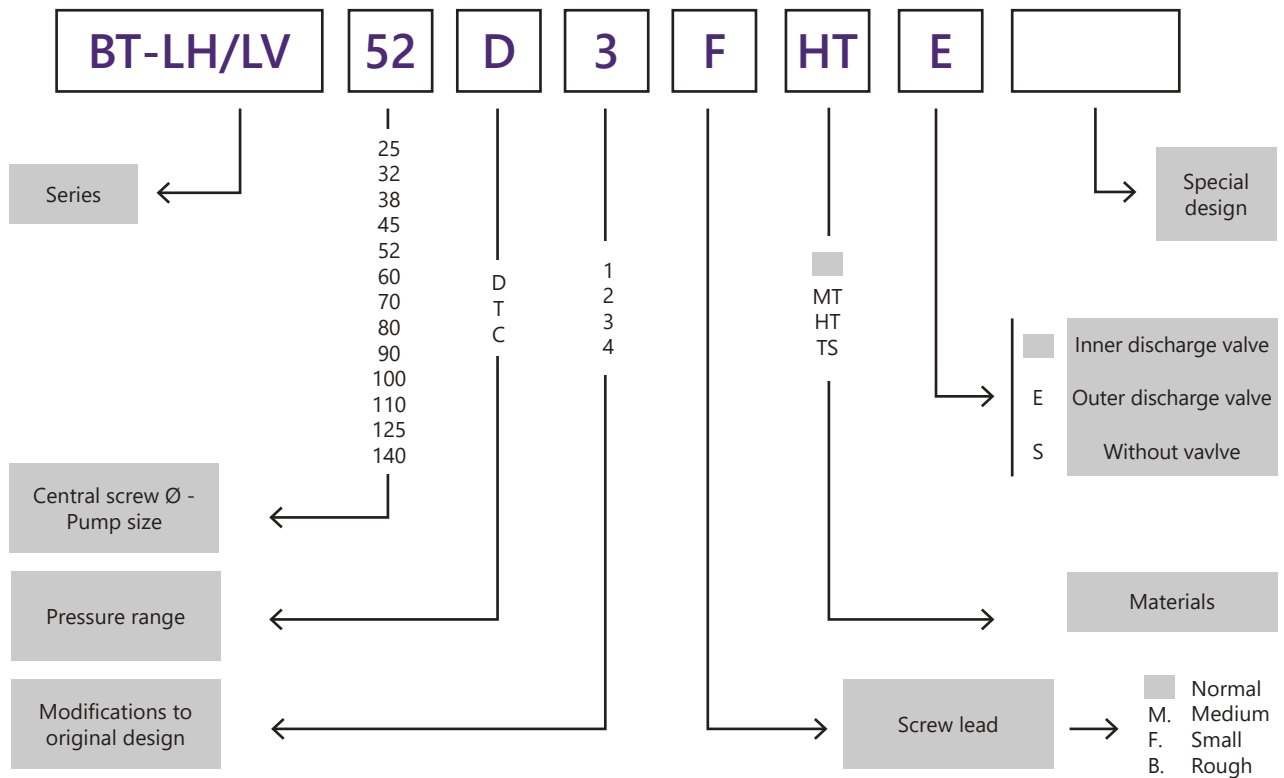
### Performance:

|                 |                       |
|-----------------|-----------------------|
| Max Flow rate   | 190 m <sup>3</sup> /h |
| Max Pressure    | 12 bar                |
| Sizes Available | DN125 - DN150 Outlet  |


### Maximum Fluid Temperature:

|        |       |
|--------|-------|
| Normal | 100°C |
| MT     | 130°C |
| HT-TS  | 155°C |

## Description



### Available Options -

- ATEX approved 
- Magnetic coupling - To prevent the leaking that can occur with worn mechanical seals. Enhances service life when used for critical applications
- Reversible operation

### Common Applications -

- Diesel
- Kerosene
- Petroleum
- Fuel oil
- Marine fuel transfer (MGO, HFO)
- Fuel oil cargo loading/unloading
- Lube oil transfer
- Lubricant circulation
- Fuel oil separation

### Benefits -

- Manufactured in Spain by manufacturer with over 100 years' experience, using materials from their own foundry for complete control
- Marine type approved by all classification societies e.g. Lloyds/ABS for independent verification the pump meets quality standards
- High flow capabilities for the handling of large volumes of fluids and bulk transfer applications
- Long coupled to separate the pump head from the motor, so should the seal fail fluid is prevented from entering the motor and causing damage to this part
- Easy to maintain thanks to being able to access the pump head without removing the motor first
- Compact and space saving design with smaller footprint compares to equivalent performing gear pump, making it ideal for installations which have limited space
- Separate shafts in pump head and motor, which means that there is no need to replace entire pump and motor if shaft wears, saving costs
- Able to handle lubricating fluids under fluctuating flow, pressure and viscosities without lose efficiency
- Interchangeable spare parts with other Azcue models to reduce stock holding required
- Spares available for a minimum of 15 years after model discontinuation for long term servicing even if the pump is no longer produced
- Bearings are greased for life with long service intervals to reduce maintenance costs – bearings replaced at 35,000 hours
- Integrated manually adjustable pressure relief valve for pump protection
- Motors are tropicalized as standard for operation up to 45°C meaning the motor is designed continue operating during higher than average temperature
- Can be reversible upon request for tank to tank transfer and for emptying the discharge line
- Magnetic coupling on request to prevent the leaking that can occur with worn mechanical seals and enhance service life when used for critical applications.
- ATEX approved version for hazardous environments and flammable fluids

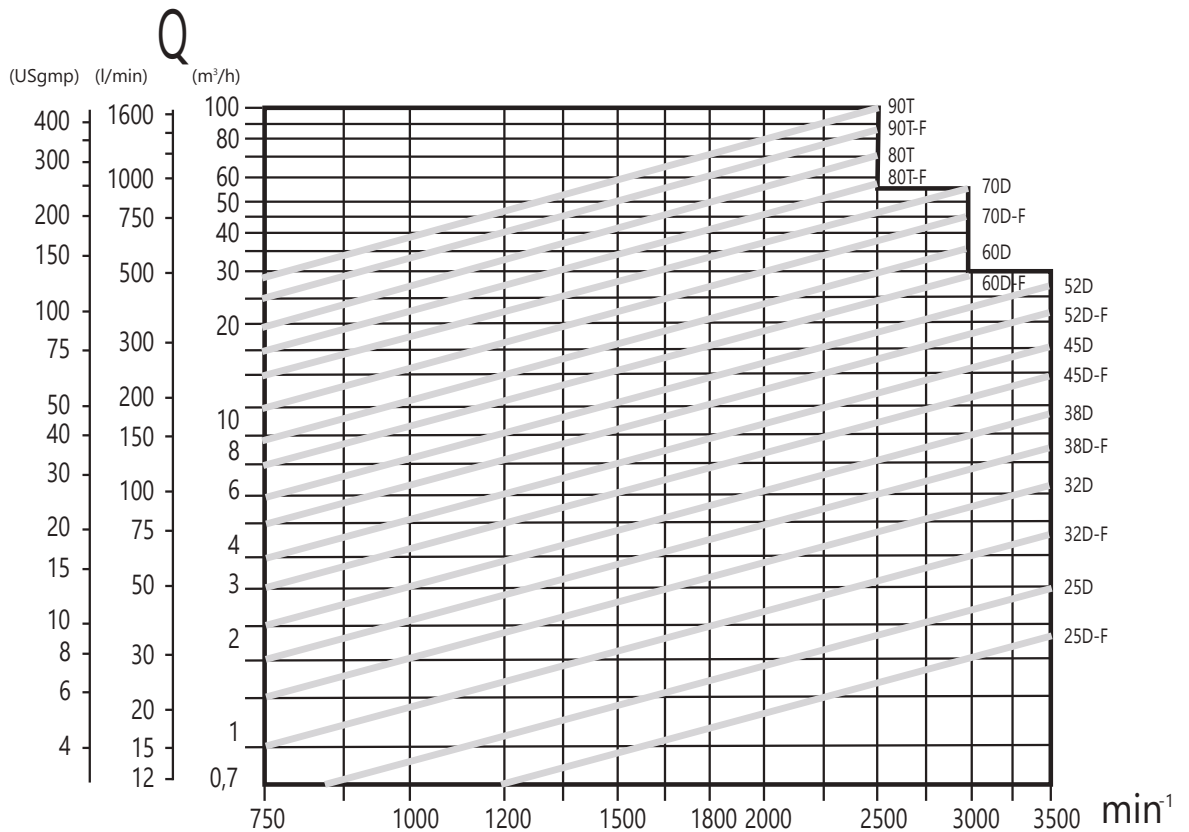
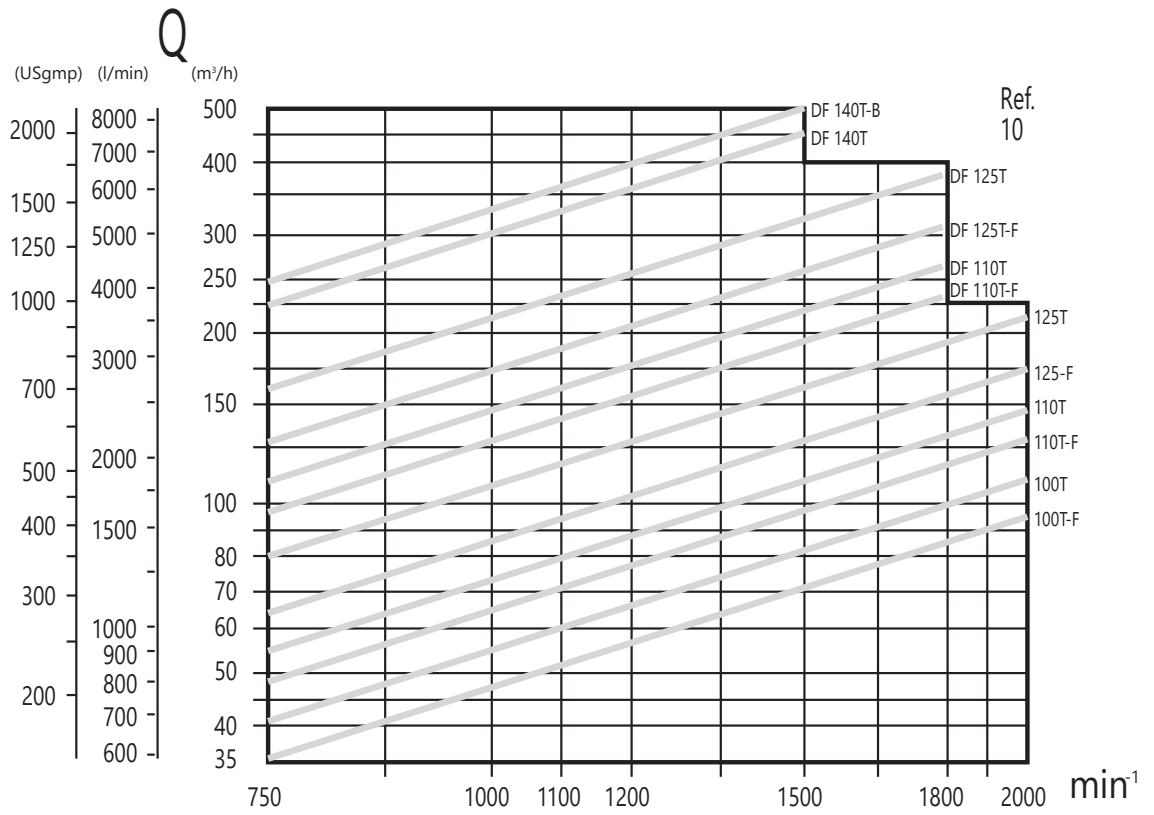


### Materials

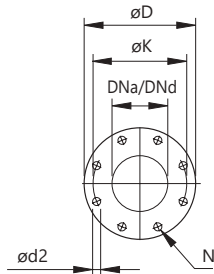
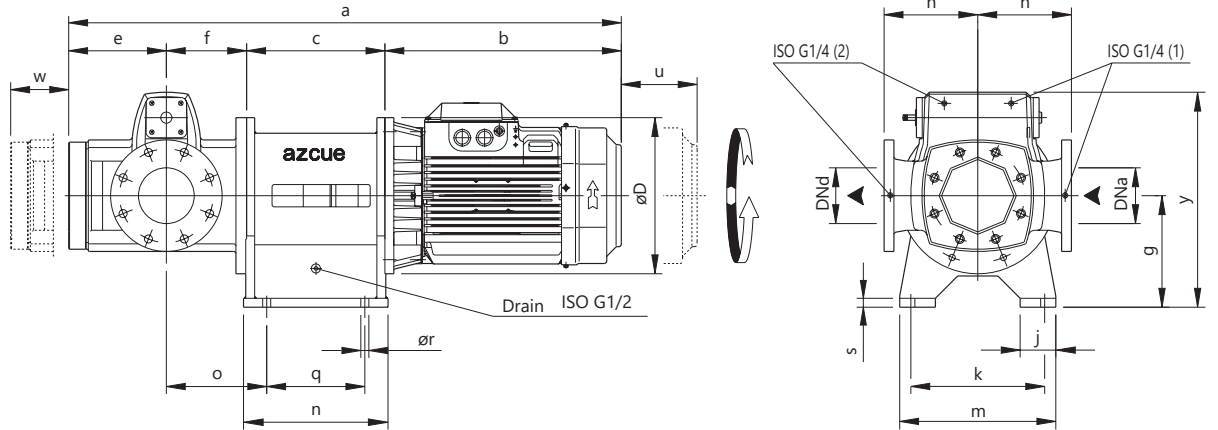
|                 | Standard                            | MT                                  | HT                                    | TS                                    |
|-----------------|-------------------------------------|-------------------------------------|---------------------------------------|---------------------------------------|
| Pump casing     | GG25                                | GGG40                               | GGG40                                 |                                       |
| Driving spindle | Nitrided Steel                      | Nitrided Steel                      | Nitrided Steel                        |                                       |
| Idler spindles  | GG30 Nitrided                       | GG30 Nitrided                       | GG30 Nitrided                         |                                       |
| Mechanical seal | Graphite<br>Hardened Steel<br>Viton | Graphite<br>Hardened Steel<br>Viton | Carb. silic.<br>Carb. silic.<br>Viton | Carb. silic.<br>Carb. silic.<br>Viton |



## Performance Curves



## Dimensions – BT-LH



DIN 2501, Pn10/16

|                |      |      |     |
|----------------|------|------|-----|
| DNa            | 125  | 150  | 200 |
| DNd            | 210  | 240  | 295 |
| K <sup>o</sup> | 250  | 285  | 340 |
| N <sup>o</sup> | 8    | 8    | 8   |
| d <sub>2</sub> | 18   | 22   | 22  |
|                | Pn16 | Pn10 |     |

(2) Manometer connection.      (1) Vacuometer connection.

| Pump         | Type  | Motor           |         |       | a    | b   | c   | D   | e   | f   | g   | h   | j   | k   | m   | n   | q   | o   | r   | s  | y  | DNa | DNd | u   | w   | kg (*) |       |
|--------------|-------|-----------------|---------|-------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|-----|-----|-----|-----|--------|-------|
|              |       | R.p.m. / t/min. | 725     | 950   |      |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |     |     |     |     |        | 1,450 |
| LH 80T 90T   | 112-M | 1,5             | 2,2     | 4     | 979  | 310 | 270 | 300 |     |     |     |     |     |     |     |     |     |     |     |    |    |     |     |     |     |        |       |
|              | 132-S | 2,2             | 3       | 5,5   | 1054 | 385 | 270 | 300 |     |     |     |     |     |     |     | 284 | 180 |     |     |    |    |     |     | 140 |     | 185    |       |
|              | 132-M | 3               | 4-5,5   | 7,5   |      |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |     |     |     |     |        |       |
|              | 160-M | 4-5,5           | 7,5     | 11    | 1239 | 530 |     |     | 219 | 180 | 250 | 210 | 80  | 300 | 350 |     |     |     | 225 | 18 | 20 | 482 | 125 | 125 | 190 |        |       |
|              | 160-L | 7,5             | 11      | 15    |      |     | 310 | 350 |     |     |     |     |     |     |     |     |     |     |     |    |    |     |     |     | 170 |        | 195   |
|              | 180-M | -               | -       | 18,5  |      |     |     |     |     |     |     |     |     |     |     |     | 324 | 220 |     |    |    |     |     |     |     |        |       |
|              | 180-L | 11              | 15      | 22    | 1289 | 580 |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |     |     |     |     |        |       |
| 200-L        | 15    | 18,5            | 30      | 1339  | 630  | 310 | 400 |     |     |     |     |     |     |     |     |     |     |     |     |    |    |     |     |     |     | 210    |       |
| LH 100T 110T | 132-M | 3               | 4-5,5   | 7,5   | 1229 | 385 | 340 | 350 |     |     |     |     |     |     |     |     |     |     |     |    |    |     |     | 140 |     |        |       |
|              | 160-M | 4-5,5           | 7,5     | 11    | 1374 | 530 |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |     |     |     |     |        |       |
|              | 160-L | 7,5             | 11      | 15    |      |     | 340 | 350 |     |     |     |     | 80  | 300 | 350 | 355 | 240 |     |     |    |    |     |     | 170 |     | 320    |       |
|              | 180-M | -               | -       | 18,5  | 1424 | 580 |     |     | 274 | 230 | 325 | 250 |     |     |     |     |     |     |     |    |    |     |     |     | 230 |        |       |
|              | 200-L | 15              | 18,5-22 | 30    | 1474 | 630 | 340 | 400 |     |     |     |     |     |     |     |     |     |     | 280 | 23 | 22 | 605 | 150 | 150 |     |        |       |
|              | 225-S | 18,5            | -       | 37    | 1574 | 700 | 370 | 450 |     |     |     |     |     |     |     |     |     |     |     |    |    |     |     |     |     |        | 335   |
|              | 225-M | 22              | 30      | 45    |      |     |     |     |     |     |     |     | 100 | 400 | 450 | 385 | 270 |     |     |    |    |     |     | 200 |     |        | 350   |
| 250-M        | 30    | 37              | 55      | 1649  | 775  | 370 | 550 |     |     |     |     |     |     |     |     |     |     |     |     |    |    |     |     |     |     |        |       |
| LH 125T      | 180-M | -               | -       | 18,5  | 1504 | 580 | 340 | 350 |     |     |     |     |     |     |     |     |     |     |     |    |    |     |     |     |     |        |       |
|              | 180-L | 11              | 15      | 22    |      |     |     |     |     |     |     |     | 80  | 300 | 350 | 355 | 240 |     |     |    |    |     |     |     | 170 |        | 375   |
|              | 200-L | 15              | 18,5-22 | 30    | 1554 | 630 | 340 | 400 |     |     |     |     |     |     |     |     |     |     |     |    |    |     |     |     |     |        |       |
|              | 225-S | 18,5            | -       | 37    | 1654 | 700 | 370 | 450 |     |     |     |     |     |     |     |     |     |     |     |    |    |     |     |     |     |        |       |
|              | 225-M | 22              | 30      | 45    |      |     |     |     | 314 | 270 | 325 | 270 |     |     |     |     |     |     |     |    |    |     |     |     | 230 |        | 390   |
|              | 250-M | 30              | 37      | 55    | 1729 | 775 | 370 | 550 |     |     |     |     |     |     |     |     |     |     |     |    |    |     |     |     | 200 |        | 405   |
|              | 280-S | 37-45           | 45-55   | 75-90 | 1854 | 900 |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |     |     |     |     |        |       |

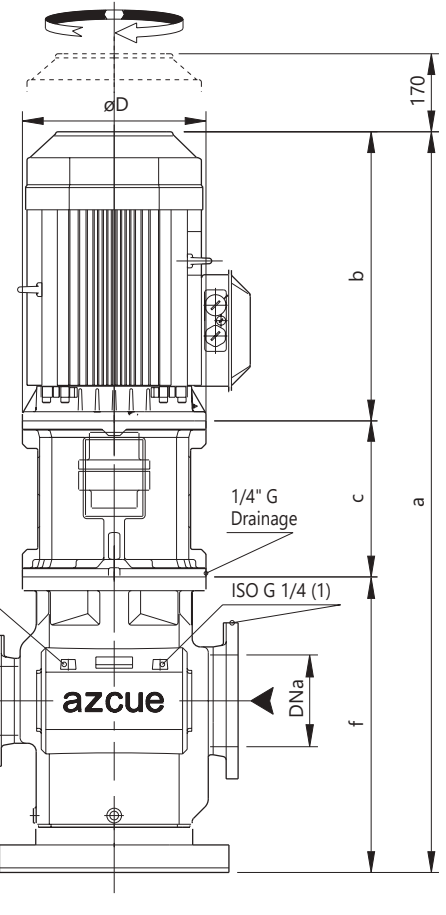
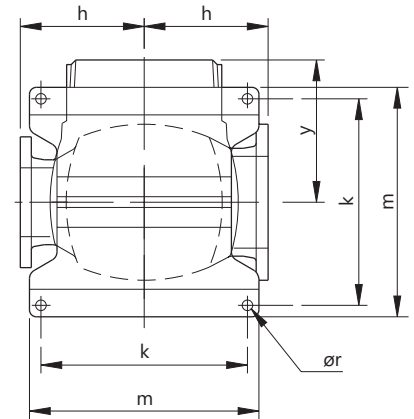
Subject to alterations

(\*) The stated weight does not include the motor



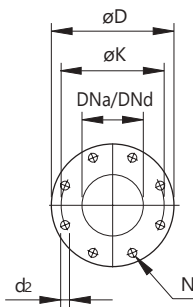
## Dimensions – BT-LV

| Pump            | Type  | Motor           |         |       | a    | b   | c   | D   | e    | f   | h   | k   | m   | r  | s  | y   | DNa | DNd | u   | kg (*) |
|-----------------|-------|-----------------|---------|-------|------|-----|-----|-----|------|-----|-----|-----|-----|----|----|-----|-----|-----|-----|--------|
|                 |       | R.p.m. / t/min. |         |       |      |     |     |     |      |     |     |     |     |    |    |     |     |     |     |        |
|                 |       | 725             | 950     | 1450  |      |     |     |     |      |     |     |     |     |    |    |     |     |     |     |        |
| LV 80T<br>90T   | 112-M | 1,5             | 2,2     | 4     | 1029 | 310 | 270 | 300 | 269  | 449 | 210 | 350 | 400 | 23 | 8  | 232 | 125 | 125 | 140 | 175    |
|                 | 132-S | 2,2             | 3       | 5,5   | 1104 | 385 | 270 | 300 |      |     |     |     |     |    |    |     |     |     |     |        |
|                 | 132-M | 3               | 4-5,5   | 7,5   |      |     |     |     |      |     |     |     |     |    |    |     |     |     |     |        |
|                 | 160-M | 4-5,5           | 7,5     | 11    | 1289 | 530 |     |     |      |     |     |     |     |    |    |     |     |     |     |        |
|                 | 160-L | 7,5             | 11      | 15    |      | 310 | 350 |     |      |     |     |     |     |    |    |     |     |     |     |        |
|                 | 180-M | -               | -       | 18,5  | 1339 | 580 |     |     |      |     |     |     |     |    |    |     |     |     |     |        |
| LV 100T<br>110T | 132-M | 3               | 4-5,5   | 7,5   | 1289 | 385 | 340 | 350 | 334  | 564 | 250 | 400 | 450 | 23 | 10 | 280 | 150 | 150 | 170 | 300    |
|                 | 160-M | 4-5,5           | 7,5     | 11    | 1434 | 530 |     |     |      |     |     |     |     |    |    |     |     |     |     |        |
|                 | 160-L | 7,5             | 11      | 15    |      |     | 340 | 350 |      |     |     |     |     |    |    |     |     |     |     |        |
|                 | 180-M | -               | -       | 18,5  | 1484 | 580 |     |     |      |     |     |     |     |    |    |     |     |     |     |        |
|                 | 180-L | 11              | 15      | 22    |      |     |     |     |      |     |     |     |     |    |    |     |     |     |     |        |
|                 | 200-L | 15              | 18,5-22 | 30    | 1534 | 630 | 340 | 400 |      |     |     |     |     |    |    |     |     |     |     |        |
| LV 125T         | 225-S | 18,5            | -       | 37    | 1634 | 700 | 370 | 450 | 374  | 644 | 270 | 450 | 500 | 23 | 10 | 310 | 200 | 150 | 200 | 310    |
|                 | 225-M | 22              | 30      | 45    | 1709 | 775 | 370 | 550 |      |     |     |     |     |    |    |     |     |     |     |        |
|                 | 250-M | 30              | 37      | 55    | 1789 | 775 |     |     |      |     |     |     |     |    |    |     |     |     |     |        |
|                 | 180-M | -               | -       | 18,5  | 1564 | 580 | 340 | 350 |      |     |     |     |     |    |    |     |     |     |     |        |
|                 | 200-L | 15              | 18,5-22 | 30    | 1614 | 630 | 340 | 400 |      |     |     |     |     |    |    |     |     |     |     |        |
|                 | 225-S | 18,5            | -       | 37    | 1714 | 700 | 370 | 450 |      |     |     |     |     |    |    |     |     |     |     |        |
| LV 125T         | 225-M | 22              | 30      | 45    | 1789 | 775 |     |     | 1914 | 900 | 550 |     |     |    |    |     |     |     |     |        |
|                 | 250-M | 30              | 37      | 55    |      |     | 370 | 550 |      |     |     |     |     |    |    |     |     |     |     |        |
|                 | 280-S | 37-45           | 45-55   | 75-90 |      |     |     |     |      |     |     |     |     |    |    |     |     |     |     |        |
|                 |       |                 |         |       |      |     |     |     |      |     |     |     |     |    |    |     |     |     |     |        |



Subject to alterations

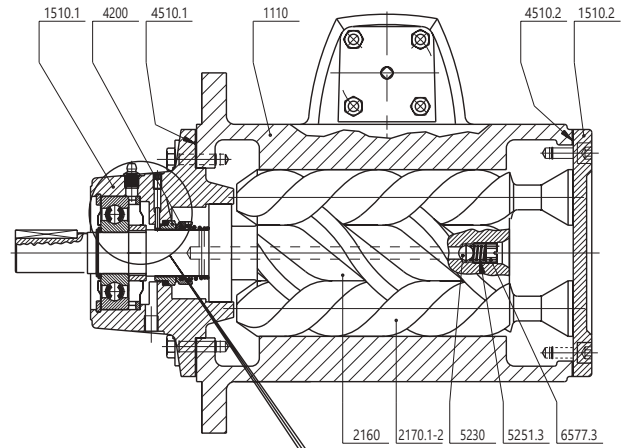
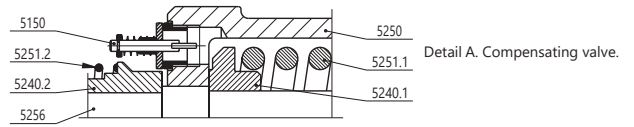
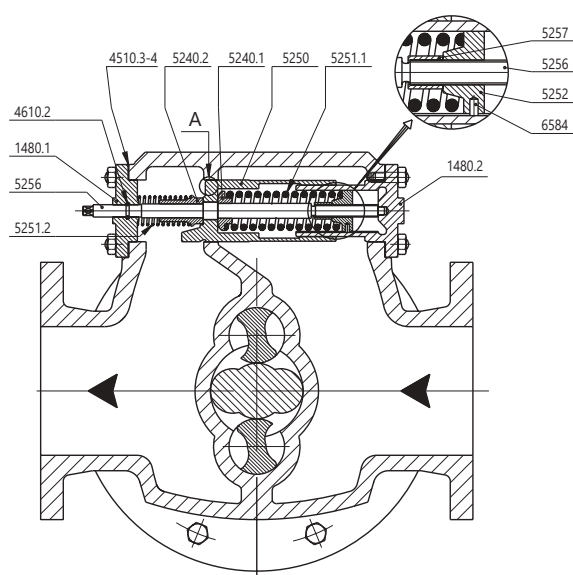
\* The stated weight does not include the motor (1) Vacuumeter connection. (2) Manometer connection.



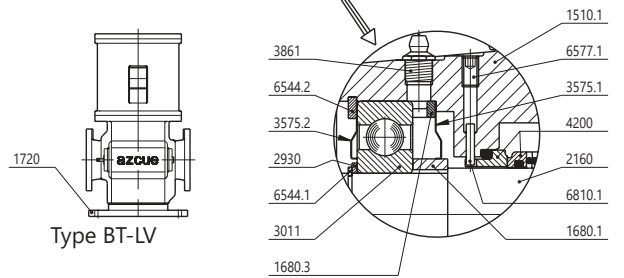
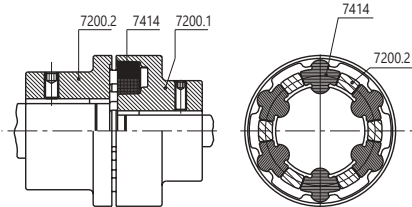
DIN 2501, Pn10/16

| DNa / DNd      | 125  | 150  | 200 |
|----------------|------|------|-----|
| K <sup>o</sup> | 210  | 240  | 295 |
| D <sup>o</sup> | 250  | 285  | 340 |
| N <sup>o</sup> | 8    | 8    | 8   |
| d <sub>2</sub> | 18   | 22   | 22  |
|                | Pn16 | Pn10 |     |

## Sectional Drawing – BT-LH/LV



Coupling



## Sectional Drawing – BT-LH/LV

| Description                | Ref.     |
|----------------------------|----------|
| Pump casing                | 1110     |
| Pump casing insert         | 1130     |
| Cover                      | 1480.1   |
| Cover                      | 1480.2   |
| Pump cover                 | 1510.1   |
| Pump cover                 | 1510.2   |
| Pump cover                 | 1510.3   |
| Spacer bush                | 1680.1   |
| Spacer bush                | 1680.2   |
| Spacer bush                | 1680.3   |
| Flange                     | 1690.1   |
| Flange                     | 1690.2   |
| Pump foot                  | 1720     |
| Driving spindle            | 2160     |
| Idler spindle              | 2170.1-2 |
| Solidary shaft             | 2161     |
| Bush                       | 2187.1   |
| Bush                       | 2187.2   |
| Thrower                    | 2540     |
| Loose collar shoulder ring | 2930     |
| Radial ball bearing        | 3011     |
| Grease retaining cover     | 3575.1   |
| Grease retaining cover     | 3575.2   |
| Bearing bush               | 3610.1-2 |
| Bearing nut                | 3850     |
| Bearing nut                | 3850.1   |
| Bearing nut                | 3850.2   |
| Grease nipple              | 3861     |
| Mechanical seal            | 4200     |
| Mechanical seal cover      | 4213     |
| Joint                      | 4510.1   |
| Joint                      | 4510.2   |
| Joint                      | 4510.3   |
| Joint                      | 4510.4   |
| Joint                      | 4510.5   |
| Joint                      | 4510.6   |
| O-ring                     | 4610.1   |
| O-ring                     | 4610.2   |
| O-ring                     | 4610.3   |
| O-ring                     | 4610.4   |
| O-ring                     | 4610.5   |
| O-ring                     | 4610.6   |
| O-ring                     | 4610.7   |
| O-ring                     | 4610.8   |
| Ball valve                 | 5120     |
| Compensating valve         | 5150     |
| Valve body                 | 5200     |
| Valve ball                 | 5230     |
| Valve seat                 | 5240.1   |
| Valve seat                 | 5240.2   |
| Valve piston               | 5250     |
| Valve spring               | 5251.1   |
| Valve spring               | 5251.2   |
| Valve spring               | 5251.3   |
| Valve spring plate         | 5252     |
| Regulating spindle         | 5256     |
| Valve spacer sleeve        | 5257     |
| Lockwasher                 | 6540.1   |
| Lockwasher                 | 6540.2   |
| Circlip                    | 6544.1   |
| Circlip                    | 6544.2   |
| Circlip                    | 6544.3   |
| Grub screw                 | 6577.1   |
| Grub screw                 | 6577.2   |
| Grub screw                 | 6577.3   |
| Grub screw                 | 6577.4   |
| Grub screw                 | 6577.5   |
| Screwed plug               | 6578.1   |
| Screwed plug               | 6578.2   |
| Guide pin                  | 6584     |
| Pin                        | 6810.1   |
| Pin                        | 6810.2   |
| Pin                        | 6810.3   |
| Filter                     | 6900     |
| Coupling half              | 7200.1   |
| Coupling half              | 7200.2   |
| Coupling bush              | 7414     |