
3PE

Aluminium gear pumps

Technical Catalogue

E0.130.04.16.02.00IM02



| | Displacement | | Working pressure P ^{1**} | | Intermittent pressure P ² | | Peak pressure P ³ | | Max. speed | Min. speed |
|---------------------------|----------------------|------------|-----------------------------------|------|--------------------------------------|------|------------------------------|------|-------------------|------------|
| | cm ³ /rev | cu.in./rev | bar | psi | bar | psi | bar | psi | | |
| GROUP 3 - E SERIES | | | | | | | | | min ⁻¹ | |
| 3PE - 21* | 20.6 | 1.26 | 250 | 3625 | 280 | 4060 | 300 | 4350 | 3000 | 600 |
| 3PE - 27 | 27 | 1.65 | 250 | 3625 | 280 | 4060 | 300 | 4350 | 3000 | 600 |
| 3PE - 33 | 33.5 | 2.04 | 250 | 3625 | 280 | 4060 | 300 | 4350 | 3000 | 600 |
| 3PE - 38 | 38.7 | 2.36 | 250 | 3625 | 280 | 4060 | 300 | 4350 | 2750 | 500 |
| 3PE - 46 | 46.9 | 2.86 | 250 | 3625 | 270 | 3915 | 280 | 4060 | 2750 | 500 |
| 3PE - 55 | 54.1 | 3.3 | 220 | 3140 | 240 | 3480 | 250 | 3625 | 2500 | 400 |
| 3PE - 65 | 63.1 | 3.85 | 200 | 2900 | 220 | 3140 | 240 | 3480 | 2500 | 400 |
| 3PE - 75* | 73.4 | 4.48 | 180 | 2610 | 200 | 2900 | 220 | 3140 | 2500 | 400 |

*Displacements 21 and 75 are special release, please contact sales department.

| | Displacement | | Working pressure P ^{1**} | | Intermittent pressure P ² | | Peak pressure P ³ | | Max. speed | Min. speed |
|-----------------------------|----------------------|------------|-----------------------------------|------|--------------------------------------|------|------------------------------|------|-------------------|------------|
| | cm ³ /rev | cu.in./rev | bar | psi | bar | psi | bar | psi | | |
| GROUP 3.5 - C SERIES | | | | | | | | | min ⁻¹ | |
| 3.5PC - 55 | 54.8 | 3.34 | 250 | 3625 | 280 | 4060 | 300 | 4350 | 2750 | 400 |
| 3.5PC - 64 | 63.2 | 3.85 | 250 | 3625 | 280 | 4060 | 300 | 4350 | 2750 | 350 |
| 3.5PC - 75 | 74.7 | 4.55 | 230 | 3330 | 250 | 3625 | 280 | 4060 | 2500 | 300 |
| 3.5PC - 87 | 88 | 5.36 | 210 | 3040 | 230 | 3330 | 260 | 3750 | 2250 | 300 |
| 3.5PC - 98* | 99 | 6.03 | 200 | 2900 | 220 | 3140 | 250 | 3625 | 2000 | 300 |

*Displacement 98 are special release, please contact sales department.

**For working conditions, using exclusively pressure P¹, the value of max. speed must be reduced of 10%.

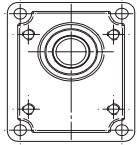
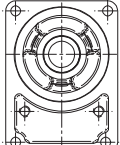
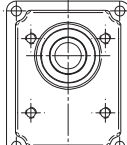
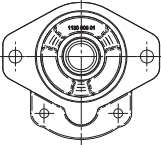
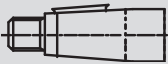


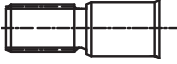

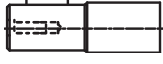
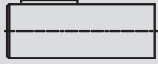
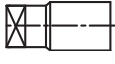
For bidirectional pump the max pressure has to be reduced of 10%.

The max pressure is referred to pumps with flanged ports, using the threaded ports the pump life could be reduced.

EO.100.0416.02.001M00



SHAFTS AND FLANGES COMBINATION

| <p>3PE</p> |  CODE P2 - European stand. |  CODE B6 - German stand. |  CODE P3 - European stand. for 3,5PC |  CODE S3 - SAE B |
|--|---|---|---|---|
|  CODE 35 - Tapered 1:5 | | <p>35B6</p> | | |
|  CODE 38 - Tapered 1:8 | <p>38P2</p> | | | |
|  CODE 48 - Tapered 1:8 for 3,5PC | | | <p>48P3</p> | |
|  CODE 55 - SAE B 13T | | | | <p>55S3</p> |
|  CODE 56 - SAE BB 15T | | | | <p>56S3</p> |
|  CODE 87 - SAE B parallel | | | | <p>87S3</p> |
|  CODE 88 - SAE BB parallel | | | | <p>88S3</p> |
|  CODE 05 - Tang drive for electric motors | | <p>05B6</p> | | |

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Displacements up to 4.48 cu.in./rev
Pressure up to 4350psi



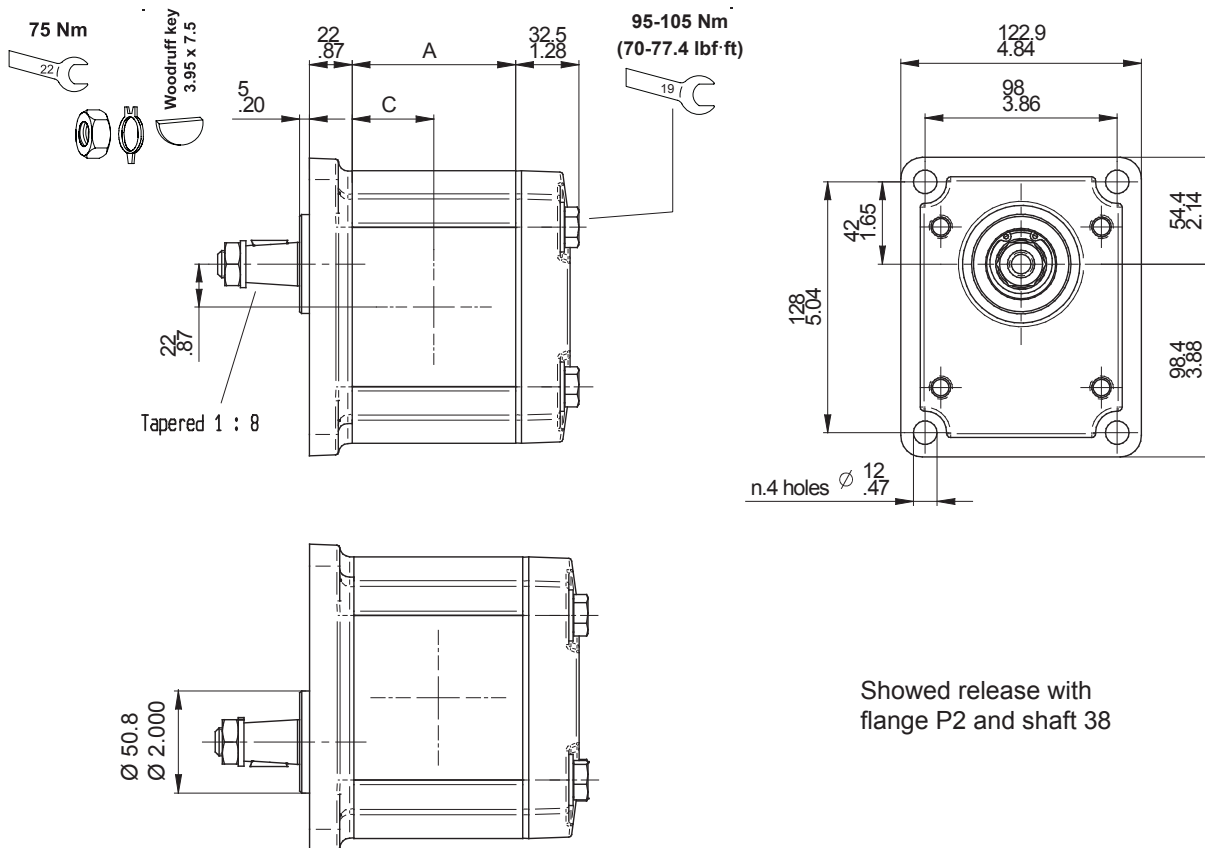
GEAR PUMPS

Displacements up to 73.4 cm³/rev
Pressure up to 300 bar

ASSEMBLING DIMENSIONS

| Type | | 21* | 27 | 33 | 38 | 46 | 55 | 65 | 75* |
|--------------|----------------------|------|------|------|------|------|------|------|------|
| Displacement | cm ³ /rev | 20.6 | 27 | 33.5 | 38.7 | 46.9 | 54.1 | 63.1 | 73.4 |
| | cu.in./rev | 1.26 | 1.65 | 2.04 | 2.36 | 2.86 | 3.3 | 3.85 | 4.48 |
| Dimension A | mm | 74 | 79 | 84 | 88 | 104 | 110 | 117 | 124 |
| | in | 2.91 | 3.11 | 3.31 | 3.46 | 4.09 | 4.33 | 4.61 | 4.88 |
| Dimension C | mm | 37 | 39.5 | 42 | 44 | 52 | 55 | 58.5 | 62 |
| | in | 1.46 | 1.56 | 1.65 | 1.73 | 2.05 | 2.17 | 2.30 | 2.44 |
| Weight | kg | 8.6 | 8.9 | 9.1 | 9.4 | 10.1 | 10.5 | 10.8 | 11.2 |
| | lbs | 19 | 19.6 | 20.1 | 20.6 | 22.3 | 23 | 23.8 | 24.6 |

*Displacements 21 and 75 are special release, please contact sales department.



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Displacements up to 448 cu.in./rev
Pressure up to 4350psi



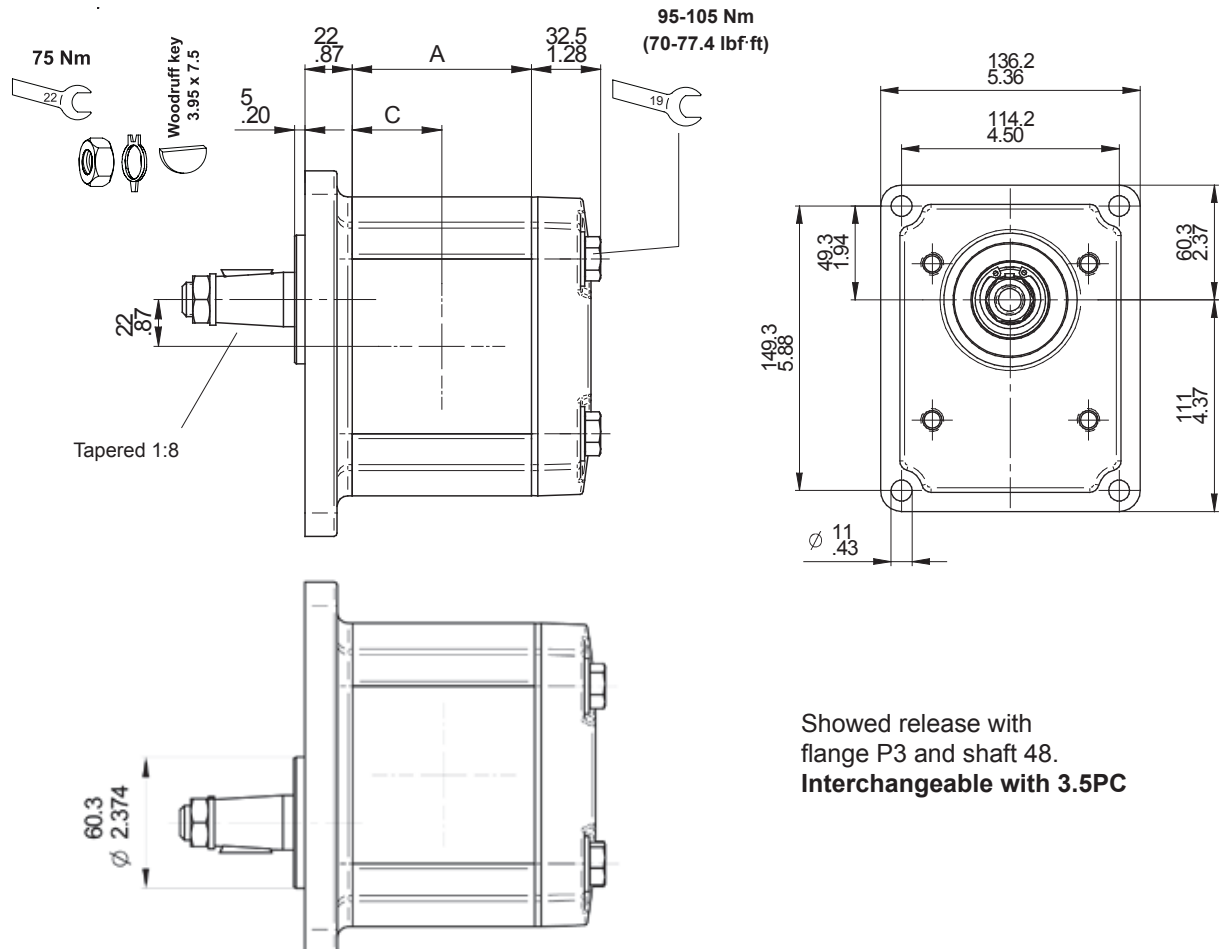
GEAR PUMPS

Displacements up to 73.4 cm³/rev
Pressure up to 300 bar

ASSEMBLING DIMENSIONS

| Type | | 46 | 55 | 65 | 75* |
|--------------|----------------------|------|------|------|------|
| Displacement | cm ³ /rev | 46.9 | 54.1 | 63.1 | 73.4 |
| | cu.in./rev | 2.86 | 3.3 | 3.85 | 4.48 |
| Dimension A | mm | 104 | 110 | 117 | 124 |
| | in | 4.09 | 4.33 | 4.61 | 4.88 |
| Dimension C | mm | 52 | 55 | 58.5 | 62 |
| | in | 2.05 | 2.17 | 2.30 | 2.44 |
| Weight | kg | 10.1 | 10.5 | 10.8 | 11.2 |
| | lbs | 22.3 | 23 | 23.8 | 24.6 |

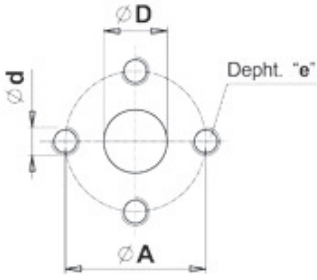
*Displacements 75 are special release, please contact sales department.



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FLANGED AND THREADED PORTS

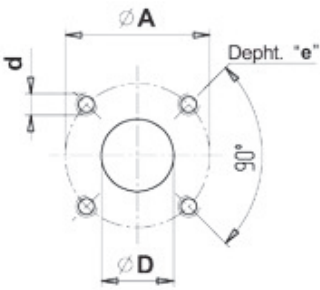


code P

Flanged ports
european standard

| UNI-DIRECTIONAL PUMPS | TYPE | INLET | | | | OUTLET | | | |
|-----------------------|---------------|---------------|---------------|-----|---------------|---------------|---------------|-----|---------------|
| | | Ø D | Ø A | d | e | Ø D | Ø A | d | e |
| | From 21 to 55 | 27 (1.06") | 51 (2.01") | M10 | 16 (0.63") | 16 (0.63") | 40 (1.57") | M8 | 16 (0.63") |
| | From 65 to 75 | 33 (1.3") | 62 (2.44") | M12 | | 21 (0.83") | 51 (2.01") | M10 | |

BI-DIRECTIONAL PUMPS Special version available on request.

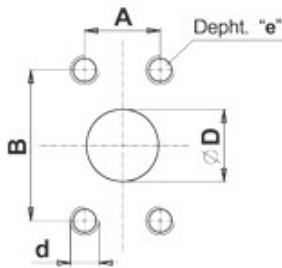


code B

Flanged ports
german standard

| UNI-DIRECTIONAL PUMPS | TYPE | INLET | | | | OUTLET | | | |
|-----------------------|---------------|---------------|---------------|----|---------------|---------------|---------------|----|---------------|
| | | Ø D | Ø A | d | e | Ø D | Ø A | d | e |
| | 21 | 22 (0.86") | 55 (2.17") | M8 | 13 (0.51") | 19 (0.75") | 55 (2.17") | M8 | 13 (0.51") |
| | From 27 to 75 | 27 (1.06") | | | | 19 (0.75") | 55 (2.17") | M8 | 13 (0.51") |

BI-DIRECTIONAL PUMPS Special version available on request.



code W

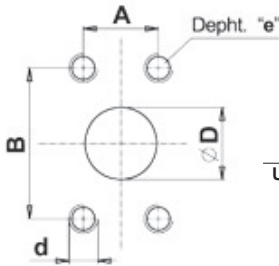
Flanged ports
SAE J518
METRIC THREAD

| UNI-DIRECTIONAL PUMPS | TYPE | INLET | | | | | OUTLET | | | | |
|-----------------------|---------------|---------------|-----------------|-----------------|-----|---------------|---------------|-----------------|-----------------|-----|---------------|
| | | ØD | B | A | d | e | ØD | B | A | d | e |
| | From 21 to 38 | 26 (1.02") | 52.4 (2.06") | 26.2 (1.03") | M10 | 18 (0.71") | 19 (0.75") | 47.6 (1.87") | 22.2 (0.87") | M10 | 18 (0.71") |
| | From 46 to 75 | 32 (1.26") | 58.7 (2.31") | 30.2 (1.19") | | | 26 (1.02") | 52.4 (2.06") | 26.2 (1.03") | | |

BI-DIRECTIONAL PUMPS Special version available on request.

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code S

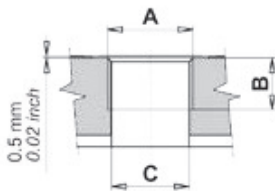
Flanged ports
SAE J518
AMERICAN STANDARD
THREAD



| UNI-DIRECTIONAL PUMPS | TYPE | INLET | | | | | OUTLET | | | | |
|-----------------------|---------------|---------------|-----------------|-----------------|----------------|---------------|---------------|-----------------|-----------------|---------------|---------------|
| | | ØD | B | A | d | e | ØD | B | A | d | e |
| | From 21 to 38 | 26 (1.02') | 52.4 (2.06') | 26.2 (1.03') | 3/8 16 UNC | 18 (0.71') | 19 (0.75') | 47.6 (1.87') | 22.2 (0.87') | 3/8 16 UNC | 18 (0.71') |
| | From 46 to 75 | 32 (1.26') | 58.7 (2.31') | 30.2 (1.19') | 7/16 14 UNC | | 26 (1.02') | 52.4 (2.06') | 26.2 (1.03') | | |



BI-DIRECTIONAL PUMPS Special version available on request.



code G

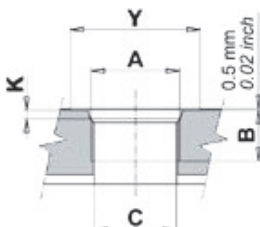
Threaded ports
GAS (BSPP)



| UNI-DIRECTIONAL PUMPS | TYPE | INLET | | | OUTLET | | |
|-----------------------|---------------|--------|---------------|-----------------|--------|---------------|---------------|
| | | A | B | C | A | B | C |
| | From 21 to 38 | G1 | 22 (0.86') | 27 (1.06') | G1 | 22 (0.86') | 27 (1.06') |
| | From 46 to 75 | G1 1/4 | 24 (0.94') | 32.5 (1.28') | | | |



BI-DIRECTIONAL PUMPS Special version available on request.



code R

Threaded ports
SAE (ODT)



| UNI-DIRECTIONAL PUMPS | TYPE | INLET | | | | | OUTLET | | | | |
|-----------------------|---------------|--------------------------|---------------|---------------|---------------|----------------|--------------------------|---------------|---------------|---------------|----------------|
| | | A | B | C | Y | K | A | B | C | Y | K |
| | From 21 to 38 | 1-5/16-12 UN (SAE 16) | 19 (0.75') | 25 (0.98') | 49 (1.93') | 3.3 (0.12') | 1-1/16-12 UN (SAE 12) | 19 (0.75') | 21 (0.83') | 41 (1.16') | 3.3 (0.13') |
| | From 46 to 75 | 1-5/8-12 UN (SAE 20) | | 27 (1.06') | 58 (2.28') | | 1-5/16-12 UN (SAE 16) | | 25 (0.98') | 49 (1.93') | |

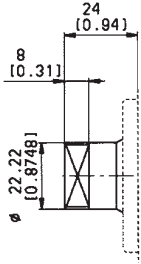


BI-DIRECTIONAL PUMPS Special version available on request.

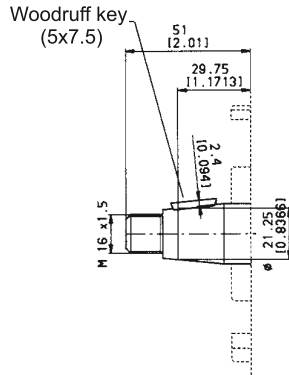
EO.130.0416.02.001M02



DRIVE SHAFTS



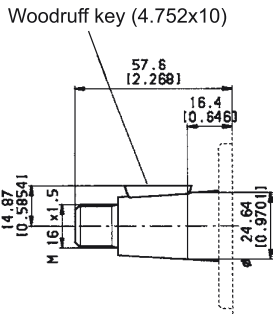
code 05 Max torque 180 Nm (1590 lbf in)
Tang drive for electric motors



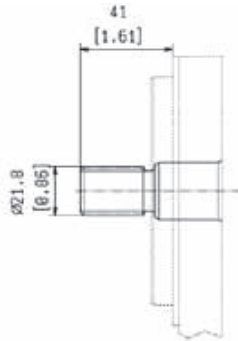
code 35 Max torque 260 Nm (2300 lbf in)
European tapered 1:5



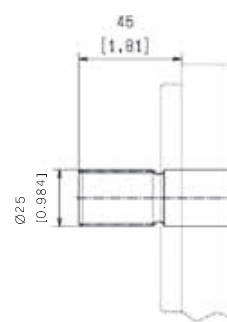
code 38 Max torque 250 Nm (2213 lbf in)
European tapered 1:8



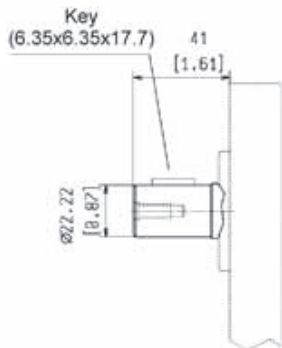
code 48 Max torque 350 Nm (3100 lbf in)
European tapered 1:8 for 3.5PC



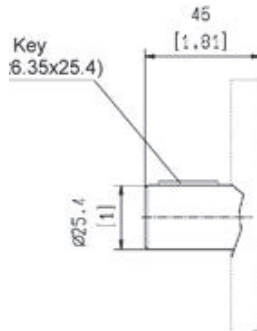
code 55 Max torque 330 Nm (2921 lbf in)
SAE B 13T-16/32DP Ansi B92 1a 1976



code 56 Max torque 480 Nm (4250 lbf in)
SAE BB 15T-16/32DP Ansi B92 1a 1976



code 87 Max torque 220 Nm (1950 lbf in)
SAE B Parallel

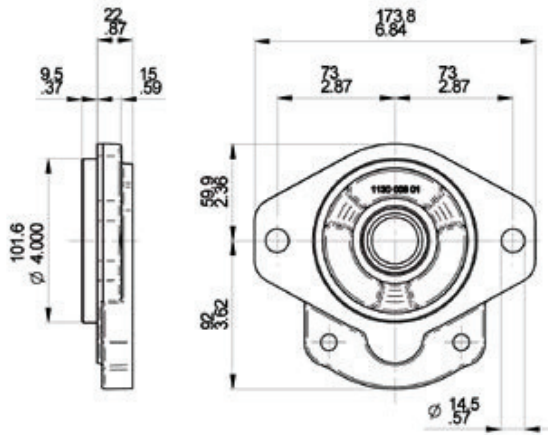


code 88 Max torque 320 Nm (2830 lbf in)
SAE BB Parallel

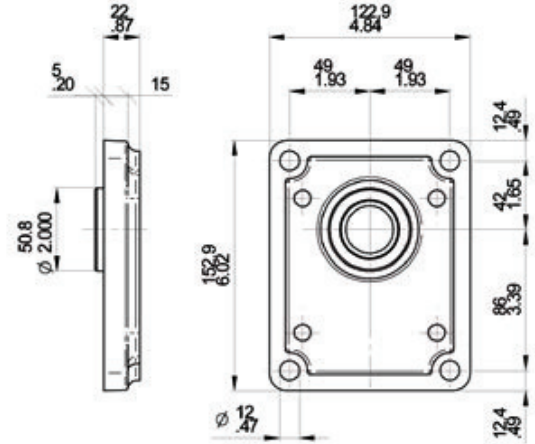
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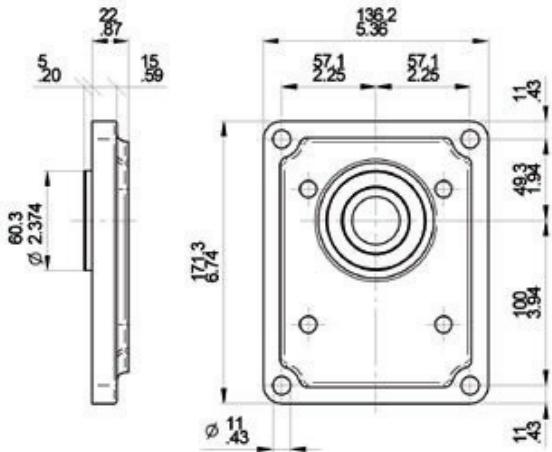
MOUNTING FLANGES



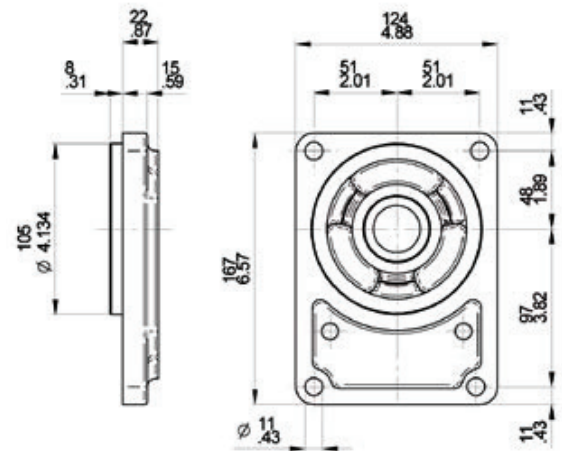
S3 SAE B 2 Bolts
With shaft code 55-56-87-88



P2 European standard
With shaft code 38



P3 European standard for 3.5PC
With shaft code 48



B6 German standard
With shaft code 05-35

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