

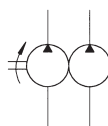
# Multiple pumps type POX

piston plus gear type - fixed displacement

**obsolete components - availability on request**

## 1 POX MULTIPLE PISTON/GEAR PUMPS

POX are fixed displacement double piston/gear pumps composed by one piston pump type PFR and one gear pump type PFG. They have two separate inlet ports and two separate outlet ports.



For technical characteristics of PFR pumps, see tab. A045; for technical characteristics of PFG pumps see tab. A055.

### 1.1 MODEL CODE FOR POX

| POX                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | - | 242 | / | D                                                                                                                                                                                         | ** | /**                                                                          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|-----|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|------------------------------------------------------------------------------|
| Fixed displacement piston/gear pump                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |   |     |   |                                                                                                                                                                                           |    | Synthetic fluids:<br><b>WG</b> = water-glycol<br><b>PE</b> = phosphate ester |
| Type:<br><b>242</b> = PFGXP-327 + PFRXF-202<br><b>262</b> = PFGXP-340 + PFRXF-202<br><b>282</b> = PFGXP-354 + PFRXF-202<br><b>245</b> = PFGXP-327 + PFRXF-203<br><b>265</b> = PFGXP-340 + PFRXF-203<br><b>285</b> = PFGXP-354 + PFRXF-203<br><b>349</b> = PFRXP-308 + PFGXF-327<br><b>370</b> = PFRXP-308 + PFGXF-340<br><b>390</b> = PFRXP-308 + PFGXF-354<br><b>355</b> = PFRXP-311 + PFGXF-327<br><b>375</b> = PFRXP-311 + PFGXF-340<br><b>395</b> = PFRXP-311 + PFGXF-354<br><b>359</b> = PFRXP-315 + PFGXF-327<br><b>379</b> = PFRXP-315 + PFGXF-340<br><b>399</b> = PFRXP-315 + PFGXF-354<br>Further composition of PFR and PFG pumps are available on request |   |     |   | Design number                                                                                                                                                                             |    |                                                                              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |   |     |   | Direction of rotation (as viewed at the shaft end):<br><b>D</b> = clockwise (supplied standard if not otherwise specified)<br><b>S</b> = counterclockwise<br>Note: POX are not reversible |    |                                                                              |

### 1.2 OPERATING CHARACTERISTICS OF STANDARD POX at 1450 rpm with hydraulic oil having a viscosity of 24 mm²/s and 40° C

| Standard model<br>(1) | Speed range<br>[rpm]<br>(2) | RADIAL PISTON PUMP        |                        |                              | GEAR PUMP                 |                        |                              | Total flow<br>[l/min] |
|-----------------------|-----------------------------|---------------------------|------------------------|------------------------------|---------------------------|------------------------|------------------------------|-----------------------|
|                       |                             | Displacement<br>[cm³/rev] | Flow<br>[l/min]<br>(3) | Max pressure<br>[bar]<br>(3) | Displacement<br>[cm³/rev] | Flow<br>[l/min]<br>(3) | Max pressure<br>[bar]<br>(5) |                       |
| POX-242               | 600-1800                    | 1,7                       | 2,5                    | 500                          | 27                        | 40,5                   | 210                          | 43                    |
| POX-262               |                             |                           |                        |                              | 40,3                      | 60,5                   | 175                          | 63                    |
| POX-282               |                             |                           |                        |                              | 53,7                      | 80,5                   |                              | 83                    |
| POX-245               |                             | 3,5                       | 5                      | 500                          | 27                        | 40,5                   | 210                          | 45,5                  |
| POX-265               |                             |                           |                        |                              | 40,3                      | 60,5                   | 175                          | 65,5                  |
| POX-285               |                             |                           |                        |                              | 53,7                      | 80,5                   |                              | 85,5                  |
| POX-349               |                             | 8,2                       | 12,5                   | 350                          | 27                        | 40,5                   | 210                          | 53                    |
| POX-370               |                             |                           |                        |                              | 40,3                      | 60,5                   | 175                          | 73                    |
| POX-390               |                             |                           |                        |                              | 53,7                      | 80,5                   |                              | 83                    |
| POX-355               |                             | 11,4                      | 16,5                   | 350                          | 27                        | 40,5                   | 210                          | 57                    |
| POX-375               |                             |                           |                        |                              | 40,3                      | 60,5                   | 175                          | 77                    |
| POX-395               |                             |                           |                        |                              | 53,7                      | 80,5                   |                              | 87                    |
| POX-359               |                             | 14,7                      | 21,5                   | 350                          | 27                        | 40,5                   | 210                          | 62                    |
| POX-379               |                             |                           |                        |                              | 40,3                      | 60,5                   | 175                          | 82                    |
| POX-399               |                             |                           |                        |                              | 53,7                      | 80,5                   |                              | 102                   |

(1) Further composition of PFR and PFG pumps are available on request. Other pump composition must be subject to verification of max torque limits allowed by drive shaft and through shaft of every pump.

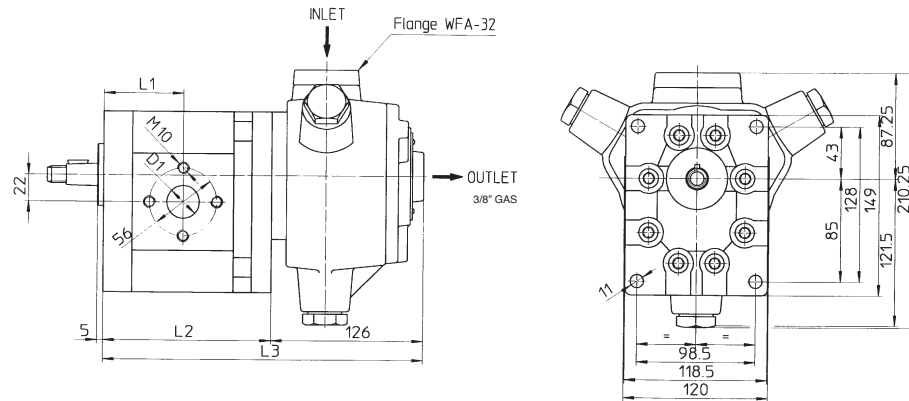
(2) Max speed is 1000 rpm for /WG versions and it is 1800 rpm for /PE versions.

(3) Flow rate and power consumption are proportional to revolution speed

(4) Max pressure is 250 bar for /PE versions and it is 175 bar for /WG versions.

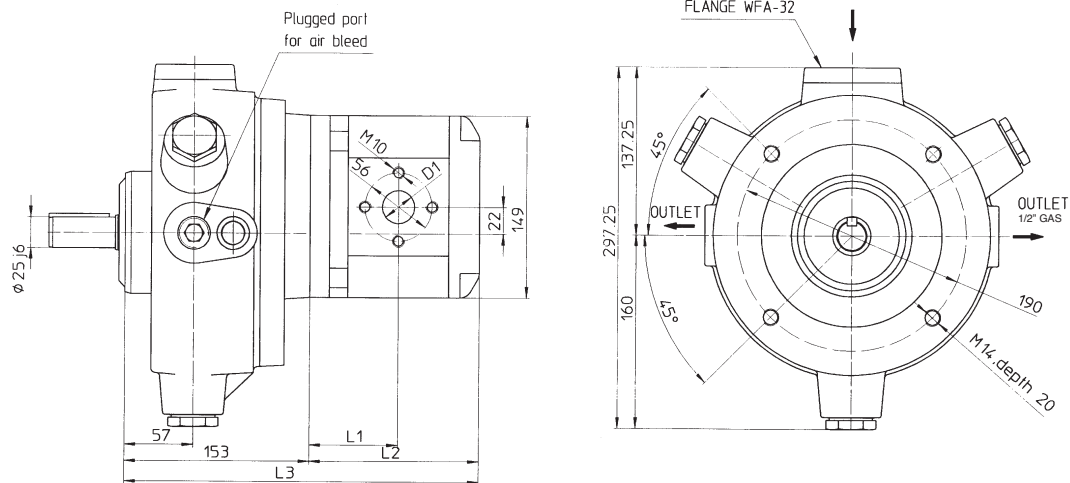
(5) Max pressure is 140 bar for /PE versions and it is 100 bar for /WG versions.

### 1.3 DIMENSIONS OF MULTIPLE PUMPS TYPE POX [mm]



For missing details see tab. A045 and A055

| Composed pump | First element<br>- gear pump - | Second element<br>- piston pump - | D1    |        | L1   | L2    | L3    |
|---------------|--------------------------------|-----------------------------------|-------|--------|------|-------|-------|
|               |                                |                                   | Inlet | Outlet |      |       |       |
| POX-242       | PFGXP-327                      | PFRXF-202                         | 27    | 19     | 66   | 139,5 | 265,5 |
| POX-262       | PFGXP-340                      | PFRXF-202                         | 27    | 19     | 70,5 | 148,5 | 274,5 |
| POX-282       | PFGXP-354                      | PFRXF-202                         | 27    | 27     | 75   | 157,5 | 283,5 |
| POX-245       | PFGXP-327                      | PFRXF-203                         | 27    | 19     | 66   | 139,5 | 265,5 |
| POX-265       | PFGXP-340                      | PFRXF-203                         | 27    | 19     | 70,5 | 148,5 | 274,5 |
| POX-285       | PFGXP-354                      | PFRXF-203                         | 27    | 27     | 75   | 157,5 | 283,5 |



For missing details see tab. A045 and A055

| Composed pump | First element<br>- piston pump - | Second element<br>- gear pump - | D1    |        | L1   | L2  | L3  |
|---------------|----------------------------------|---------------------------------|-------|--------|------|-----|-----|
|               |                                  |                                 | Inlet | Outlet |      |     |     |
| POX-349       | PFRXP-308                        | PFGXF-327                       | 27    | 19     | 73,5 | 141 | 294 |
| POX-370       | PFRXP-308                        | PFGXF-340                       | 27    | 19     | 78   | 150 | 303 |
| POX-390       | PFRXP-308                        | PFGXF-354                       | 27    | 27     | 82,5 | 159 | 312 |
| POX-355       | PFRXP-311                        | PFGXF-327                       | 27    | 19     | 73,5 | 141 | 294 |
| POX-375       | PFRXP-311                        | PFGXF-340                       | 27    | 19     | 78   | 150 | 303 |
| POX-395       | PFRXP-311                        | PFGXF-354                       | 27    | 27     | 82,5 | 159 | 312 |
| POX-359       | PFRXP-315                        | PFGXF-327                       | 27    | 19     | 73,5 | 141 | 294 |
| POX-379       | PFRXP-315                        | PFGXF-340                       | 27    | 19     | 78   | 150 | 303 |
| POX-399       | PFRXP-315                        | PFGXF-354                       | 27    | 27     | 82,5 | 159 | 312 |

POX pumps are supplied with WFA inlet flange for PFR, WLG-3-100 (inlet) and WLG-2-34 (outlet) elbow connections for PFG; see [www.scoda.it](http://www.scoda.it), tab. SK155.