

Key to SPX Johnson Pump type specification system

Pump types F2–F95 (excluding F70, F80 and F100)

Example:

F 7 B - 3 0 0 0

| | | |
|---|--|---|
| Pump type F = Flexible Impeller | | Port connection 0 = BSP thread 7 = NPTF thread (on request) |
| Pump size 2 3/35 4 5 6 7 75 8 9 95 ↓ Generally increasing size | | Cam size 0 = $\frac{1}{4}$ - Standard 2 = $\frac{1}{2}$ 3 = $\frac{3}{4}$ |
| Body material B = Bronze P1 = Epoxy | | Impeller material 0 = Neoprene 5 = Neoprene - Intermediate pressure 6 = Neoprene - High pressure 9 = Nitrile |
| | | Mounting 1 = Flange mounted to the motor 3 = Pedestal mounted with double ball bearings and mech. seal. 5 = Pedestal mounted with double ball bearings and mech. seal, magnetic clutch operated. 5001 = Compact unit with lip seal *) 8 = General purpose with double ball bearings and lip seal *) 9 = Custom, follows customer's specification <small>*) F8B-5001, F8B-8 also available with mech. seal</small> |

Raw Water Pump for Yanmar 6LYA-STP = Yanmar PN 10-13170-01 = Johnson Pump F75B-9

Impeller = Yanmar PN 119574-42552 = Johnson Pump 09-821BT (replaces 08-821B)

Impeller overview

| Pump-size | Impeller part no. | Impeller material | Insert material | Min start torque (Nm) | Min reverse torque (Nm) | Liquid-temp. °C | Max head (bar) | Max flow (l/min) | Max speed (rpm) | Manometric suction-lift (m) |
|-----------|-------------------|-------------------|-----------------|-----------------------|-------------------------|-----------------|----------------|------------------|-----------------|-----------------------------|
| F2P10-19 | 08-1077B-9 | Nitrile | Bronze | 0.3 | 0.9 | -15 to +85 | 0.9 | 16 | 4.000 | 1.5 |
| TA3P10 | 08-1052S-9 | Nitrile | Stainless | 0.1 | 0.4 | -15 to +85 | 2.0 | 27 | 3.800 | 0.5 |
| F3B-19 | 08-843S-9 | Nitrile | Stainless | 0.1 | 0.4 | -15 to +85 | 2.0 | 21 | 3.800 | 3.0 |
| F35 | 08-806B-1 | EPDM | Bronze | 0.7 | 1.7 | +3 to +80 | 1.5 | 33.5 | 4.500 | 2.5 |
| | 08-808B-1 | EPDM | Bronze | 0.7 | 1.7 | +3 to +80 | 1.5 | 33.5 | 4.500 | 2.5 |
| F4 | 08-810B-1 | EPDM | Bronze | 1.0 | 2.3 | +3 to +80 | 2.0 | 81 | 4.500 | 2.5 |
| | 08-810B-9 | Nitrile | Bronze | 1.0 | 2.3 | -15 to +85 | 1.5 | 34.5 | 2.800 | 2.5 |
| | 08-1026B-1 | EPDM | Bronze | 1.0 | 2.3 | +3 to +80 | 1.5 | 81 | 4.500 | 2.5 |
| | 08-1026B-9 | Nitrile | Bronze | 1.0 | 2.3 | -15 to +85 | 1.5 | 35.5 | 2.800 | 2.5 |
| F4B-19 | 08-824P-1 | EPDM | Plastic | 0.3 | 0.9 | -15 to +85 | 1.9 | 53.0 | 3.300 | 3.0 |
| | 08-824P-9 | Nitrile | Plastic | 0.3 | 0.9 | -15 to +85 | 1.5 | 48.0 | 3.300 | 3.0 |
| F5 | 08-801B | Neoprene | Bronze | 2.2 | 5.2 | +3 to +80 | 2.5 | 55 | 2.800 | 4.5 |
| | 08-1027B | Neoprene | Bronze | 2.2 | 5.2 | +3 to +80 | 2.5 | 75 | 4.500 | 4.5 |
| | 08-1027BT | Neoprene | Bronze, thread | 2.2 | 5.2 | +3 to +80 | 2.5 | 75 | 4.500 | 4.5 |
| | 08-1027B-1 | EPDM | Bronze | 2.2 | 5.2 | +3 to +80 | 2.5 | 75 | 4.500 | 4.5 |
| | *08-1027B-10 | EPDM | Bronze | 2.2 | 5.2 | +3 to +80 | 2.5 | 75 | 4.500 | 4.5 |
| | 08-1027B-9 | Nitrile | Bronze | 2.2 | 5.2 | -15 to +85 | 1.75 | 75 | 2.800 | 3.5 |
| F6 | 08-812B | Neoprene | Bronze | 2.8 | 7.1 | +3 to +80 | 2.5 | 135 | 4.500 | 5.0 |
| | 8-812B-1 | EPDM | Bronze | 2.8 | 7.1 | +3 to +80 | 2.5 | 135 | | |
| F7 | 08-1028B | Neoprene | Bronze | 4.6 | 8.3 | +3 to +80 | 2.5 | 158 | 3.000 | 5.0 |
| | 08-1028BT-1 | EPDM | Bronze, thread | 4.6 | 8.3 | +3 to +80 | 2.5 | 158 | 3.000 | 5.0 |
| | 08-1028B-9 | Nitrile | Bronze | 4.6 | 8.3 | -15 to +85 | 1.75 | 158 | 3.000 | 4.0 |
| | 08-1028S-9 | Nitrile | Stainless | 4.6 | 8.3 | -15 to +85 | 1.75 | 158 | 3.000 | 4.0 |
| | 08-816B | Neoprene | Bronze | 7.2 | 12 | +3 to +80 | 4.0 | 105 | 2.000 | 5.0 |
| | 08-816S | Neoprene | Stainless | 7.2 | 12 | +3 to +80 | 4.0 | 83 | 1.500 | 5.0 |
| F75 | 08-821B | Neoprene | Bronze | 4.5 | 12 | +3 to +80 | 2.5 | 270 | 3.500 | 5.0 |
| | 08-821BT | Neoprene | Bronze, thread | 4.5 | 12 | +3 to +80 | 2.5 | 270 | 3.500 | 5.0 |
| | 08-821BT-1 | EPDM | Bronze, thread | 4.5 | 12 | +3 to +80 | 2.5 | 270 | 3.500 | 5.0 |
| F8 | 08-1029B | Neoprene | Bronze | 11 | 24 | +3 to +80 | 2.5 | 295 | 2.200 | 5.0 |
| | 08-818B | Neoprene | Bronze | 19 | 32 | +3 to +80 | 4.0 | 295 | 2.500 | 5.0 |
| | 08-819B | Neoprene | Bronze | 11 | 25 | +3 to +80 | 2.5 | 295 | 2.800 | 5.0 |
| | 08-819B-9 | Nitrile | Bronze | 11 | 25 | -15 to +85 | 1.75 | 295 | 2.500 | 4.0 |
| F9 | 08-802B | Neoprene | Bronze | 16 | 39 | +3 to +80 | 2.5 | 440 | 2.200 | 5.0 |
| | 08-814B | Neoprene | Bronze | 13 | 38 | +3 to +80 | 3.5 | 350 | 2.000 | 5.0 |
| F95 | 08-820B | Neoprene | Bronze, thread | 18 | 56 | +3 to +80 | 2.5 | 625 | 2.500 | 5.0 |
| F98 | 08-842B | Neoprene | Bronze, thread | 23 | 70 | +3 to +80 | 2.5 | 840 | 2.500 | 5.0 |

Note! Max feeding pressure all pumps = 0.5 bar

Note! To obtain a long impeller life, operate between +4°C and +55°C and use Johnson Pump Impeller lubricant.

Note! If pump speed exceed specification above, contact Johnson Pump representative for advice.

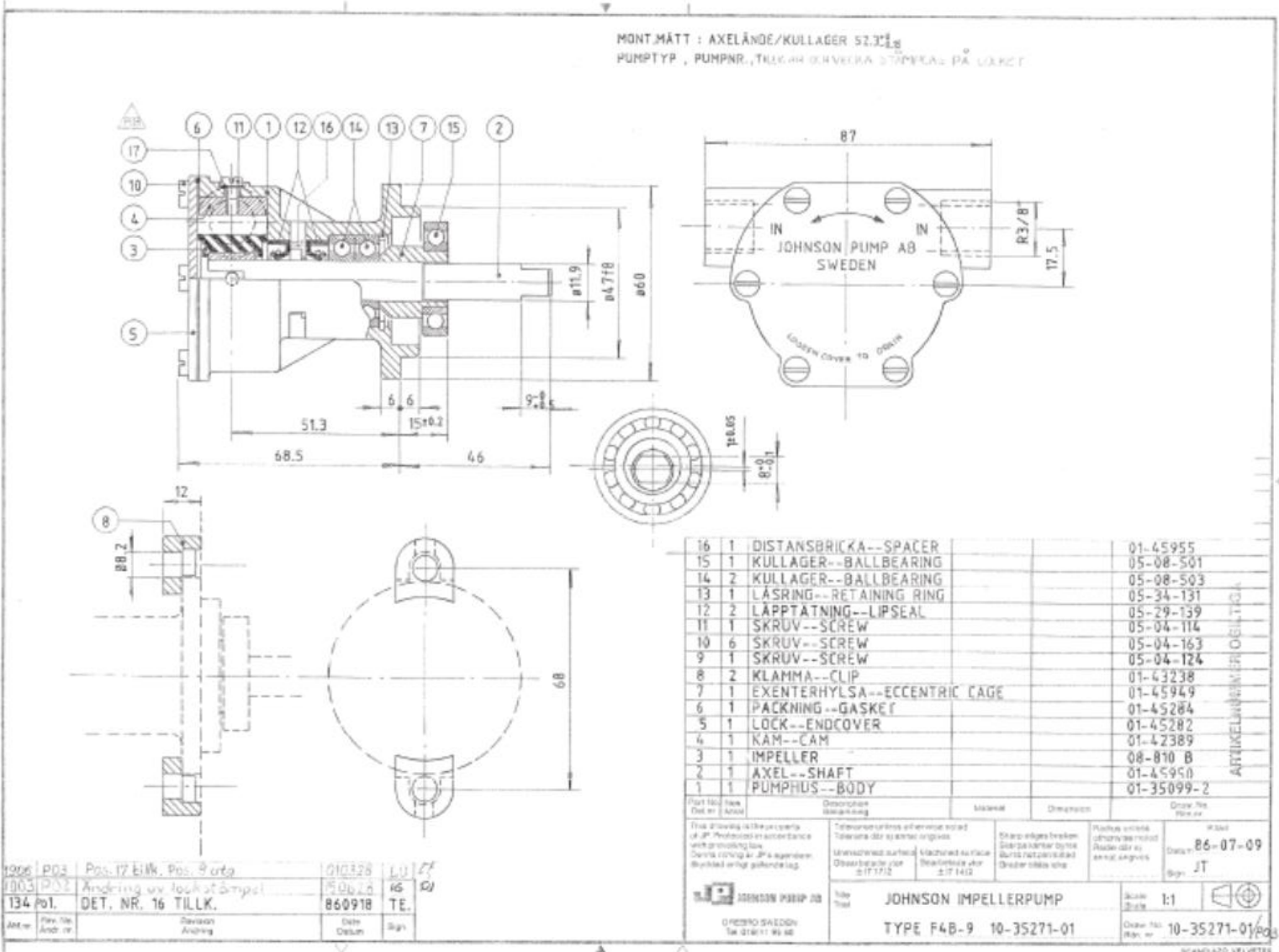
* Impeller made with special dimensions.

F75B-9 Impeller pump
Art. No. 10-13170-01

Manufacturing requirement no. 97-13170

| Part no. | Description GB | Position | Quantity |
|-------------|-------------------------------------|----------|----------|
| 01-13172-1 | BODY F75B-9 | 1 | 1 |
| 01-35771 | SHAFT F75B-9 | 2 | 1 |
| 01-46146 | CAM 1/1 F75B | 3 | 1 |
| 01-42443 | WEARPLATE F7B/F70B | 4 | 1 |
| 01-42400 | PIN F35B-/F7B/F70B | 5 | 1 |
| 01-46284-1 | SPACER F75B-9 | 6 | 1 |
| 01-46285 | ENDCOVER F75B-9 | 7 | 1 |
| 01-46790-02 | WASHER D8.2XD14X1 CU | 8 | 1 |
| 0.0141.502 | SCREW M5X8 DIN933SLOTTED BRASS | 9 | 6 |
| 01-46794-12 | SCREW M8X12 ALBRONZE | 10 | 1 |
| 0.2172.573 | O-RING 23.4X3.53 BS1806 NBR70 | 11 | 1 |
| 0.2173.493 | O-RING 64.6X2.4 SS1586 NBR70 | 12 | 1 |
| 0.3431.485 | BALL BEARING 6205 ST | 13 | 2 |
| 0.2247.008 | MECH.SEAL COMPL PA25.47.14 | 14 | 1 |
| 0.2233.008 | OIL SEAL 25X40X7 BAUSL NBR | 15 | 1 |
| 0.0371.052 | RETAIN. RING BORE D52 DIN472 SPR ST | 16 | 1 |
| 0.0370.525 | EXT. CIRCLIP D25 DIN471 ST | 17 | 2 |
| 08-821B | IMPELLER F75B | 18 | 1 |
| 0.0633.715 | PLUG TYPE 254 D36.4MM CERBO | 0 | 1 |
| 0.0633.711 | PLUG TYPE 252-2 D32.8MM CERBO | 0 | 1 |
| 0.3444.022 | PLASTIC BAG 250X325X0.04 | 0 | 1 |





10-35271

pump F4B-9

Engine cooling

Spare parts

Johnson Flexible Impeller Pumps

482

Spare parts, Service kit

| | | A | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | |
|---------------------------------|--------------|-------------|-------------|----------|-------------|---------------|------------|------------|----------------|-----------|----------|------------|----------------------------|--|
| Part no. | Pump type | Service kit | Impeller | Cam | Camscrew | Seal | Gasket | Endcover | Endcover screw | Wearplate | Shaft | Bearing | Bearing seal | Clutch or Motor |
| 10-13159-05 Obsolete | F5B-905 | - | 09-1027B-1* | 01-46474 | 01-46794-12 | 0.2233.001 | 01-46473 | Cust.brand | 0.0141.502 | - | - | 0.3431.761 | - | - |
| 10-13159-06 Obsolete | F5B-905 | - | 09-1027B-1* | 01-46474 | 01-46794-12 | 0.2233.001 | 01-46473 | Cust.brand | 0.0141.502 | - | - | 0.3431.761 | - | - |
| 10-13159-07 Customer branded | F5B-905 | - | 09-1027B-1* | 01-46706 | - | 0.2233.001 | 0.2173.471 | Cust.brand | 0.0141.502 | - | 01-46475 | 0.3431.761 | - | - |
| 10-13159-08 Customer branded | F5B-905 | - | 09-1027B-1* | 01-46706 | - | 0.2233.001 | 0.2173.471 | Cust.brand | 0.0141.502 | - | 01-46475 | 0.3431.761 | - | - |
| 10-13165-01 Customer branded | F9B-9 | 09-46599-1 | 09-820B | 01-35744 | 01-46794-09 | 09-0.2247.018 | 0.2172.142 | 01-35773-2 | 0.0138.134 | 01-42423 | 01-35743 | 0.3428.516 | 0.2234.502 | - |
| 10-13165-02 | F9B-9 | 09-46599-1 | 09-820B | 01-35744 | 01-46794-09 | 09-0.2247.018 | 0.2172.142 | 01-35773-2 | 0.0138.134 | 01-42423 | 01-35743 | 0.3428.516 | 0.2234.502 | - |
| 10-13166-01 Customer branded | F9B-905 | 09-45582 | 09-814B | 01-45018 | 01-46794-02 | 09-0.2247.051 | 01-42424 | 01-42422-1 | 0.0144.003 | 01-42423 | 01-35742 | 0.3431.486 | 0.2233.002 | - |
| 10-13170-01 Customer branded | F75B-9 | - | 09-821B | 01-46146 | 01-46794-12 | 09-0.2247.008 | 0.2173.493 | 01-46285 | 01-46794-12 | 01-42443 | 01-35771 | 0.3431.485 | 0.2233.008 | - |
| 10-13171-01 Customer branded | F9B-905 | - | 09-814B | 01-45172 | 01-46794-09 | 09-0.2247.051 | 0.2172.142 | 01-42422-1 | 0.0138.134 | 01-46538 | 01-35833 | 0.3431.780 | 0.2230.319 | - |
| 10-13175-01 | F9B-3000-TSS | 09-45579 | 09-819B | 01-42680 | 01-46794-02 | 09-0.2247.051 | 01-42424 | 01-42422-1 | 0.0144.200 | 01-42423 | 01-35137 | 0.3431.780 | 0.2230.319 | - |
| 10-13176-99 | F9B-5000-TSS | 09-45579 | 09-819B | 01-42680 | 01-46794-02 | 09-0.2247.051 | 01-42424 | 01-42422-1 | 0.0144.200 | 01-42423 | 01-35138 | 0.3431.780 | 0.2234.337 / 0.2230.319 | 0.3454.001 = 12V 2xA 0.3454.002 = 24V 2xA 0.3454.003 = 12V 1xB 0.3454.004 = 24V 1xB |
| 10-13177-01 | F9B-3000-TSS | 09-45581 | 09-802B | 01-43137 | 01-46794-02 | 09-0.2247.051 | 01-42424 | 01-42422-1 | 0.0144.200 | 01-42423 | 01-35137 | 0.3431.780 | 0.2234.337 / 0.2230.319 | - |
| 10-13178-99 | F9B-5000-TSS | 09-45582 | 09-814B | 01-43137 | 01-46794-02 | 09-0.2247.051 | 01-42424 | 01-42422-1 | 0.0144.200 | 01-42423 | 01-35137 | 0.3431.780 | 0.2230.319 | 0.3454.001 = 12V 2xA 0.3454.002 = 24V 2xA 0.3454.003 = 12V 1xB 0.3454.004 = 24V 1xB |

A - parts no. 1, 4, 5, 7 included

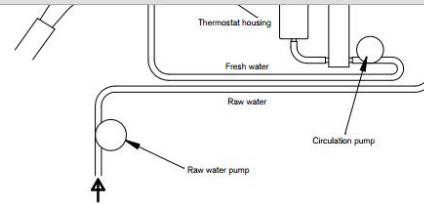
* - gasket included

** - shaft drive end

*** - included in service kit

**** - back

***** - front



Take good care of the cooling system – change to a new impeller every year!

The impeller is a very important security device. Its task is to pump the water through the cooling system of the engine. But remember that the impeller should be replaced every year. And always make sure you get a SPX Johnson Pump original impeller. Then you'll know that it matches your pump exactly.

Remove the impeller with a slip joint plier or an Impeller.



| Order No. | Description |
|-------------|----------------------|
| 09-47165-01 | Puller for 09-1028BT |
| 09-47163-01 | Puller for 09-821BT |
| 09-36166-01 | Puller for 09-820B |

| Order No. | Description |
|------------|-------------|
| 09-950-930 | JP Impeller |



Johnson Pump