

Product Information Bulletin

PIB: PV2022-252

Date: 19 October 2022

Products affected:

All spools for PVG 16

Subject: Version Two – Code Number Correction

Introduce updated flow notches and tension bar

Component	All PVBS16 spools and tension bar for the spools
Modified	PVBS16 program
Date of Introduction	1 July 2022
Customer Action	<ol style="list-style-type: none">1. Prepare your organization for release of new and updated spools for PVG162. Update relevant documentation and PVG valve stack specifications to reflect the new PVG 16 spools and performance

Revision:

Two code numbers were referenced incorrectly and have been updated in the notes below and highlighted on the charts on pages four and five.

Existing number 11160957 was referenced to an incorrect number.

The correct new number for this spool is 11309231.

Existing number 11145754 was entered incorrectly.

Correct existing code number is 11146754.

To align our PVG16 portfolio, we will introduce new flow notches and new tension bars for the PVG 16 spools, to align performance and be comparable with PVG32.

Flow Notches:

Updated PVBS16 spools with new flow notches design will be in line with the design of the PVG 32.

The new notches will improve the flow curves to a more progressive type similar to those for PVG 32.

The design is based on proven-in-use technologies with improved performance on the following parameters:

- Improved fine metering
- Comparable performance between 16 and 32
- All new part numbers will be available from Q3 2022 for new PVG stacks and as well as for PVBS spare parts.
- Current spool part numbers will be manufactured until end of 2022 and then they will be obsoleted.
- The conversion of spools in PVG groups will take place from Q3 2022 onwards.
- The current design is still valid as long as stock is available
- **Form:** No influence
- **Fit:** No influence
- **Function:** Improved controllability
- **Appearance:** The appearance will change as per the pictures

Ordering:

- The PVBS 16 will have a new code number. Service and Repair Manuals should be updated to reflect the new code number.
- All PVBS 16 spools enclosed "PVBS 16 Upgrade Code Number List" can be ordered as single parts starting Q3 2022.
- Starting Q3 2022, all new valve stacks will have the new PVBS 16.

Conversion:

- We will as default be issuing new valve stack code numbers for the conversion. These will be communicated to you with your implementation date prior to converting.
- We will give a minimum of 4 weeks' notice before converting to the new PVBS 16 spools.

Flow notch comparison with current and new notches

WAS: (25 liter notch)



WILL BE: (25 liter notch)

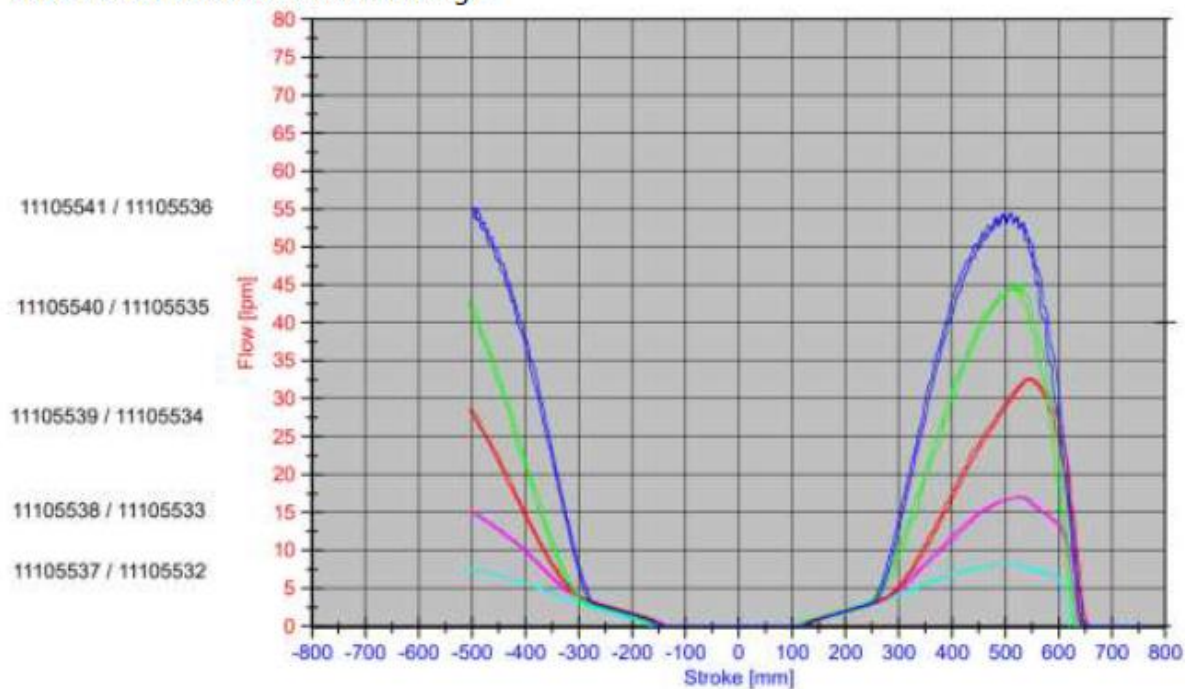
**Flow curve comparison with current and new curves:**

The spools will be progressive in performance, similar to PVG32.

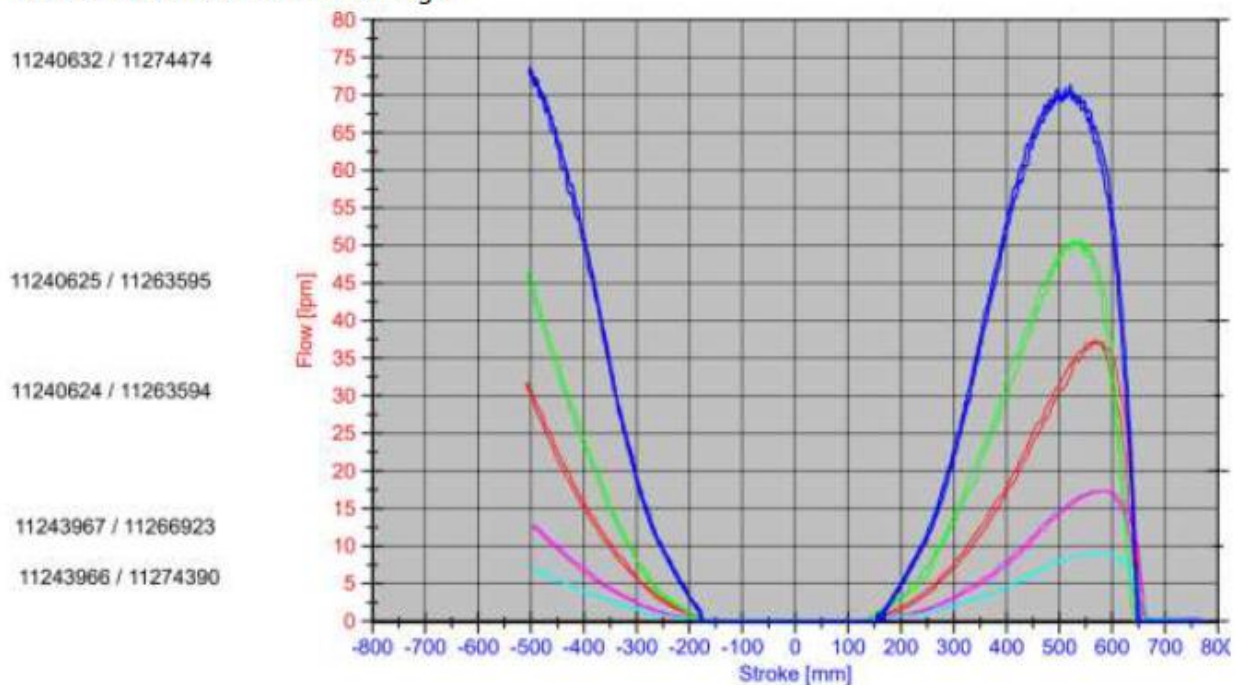
Below are some comparison tests, showing the improved performance and controllability.

See below graphs for the different spool sizes (for spools below 10 liter/min, there is no difference and therefore not shown).

PVBS 16 flow curves with current design.



PVBS 16 flow curves with new design.



Please note:

For customers currently using 65 L/min spool may see an increase in control speed when changing over to the new 65 l/min spool, at full spool travel. Spools for customer testing will be available upon request.

Existing PN	Description	New PN	Description
11105537	PVE 5 [1.32] 5 [1.32] 5 [1.32] 5 [1.32]	11243966	PVE 5 [1.32] 5 [1.32] 5 [1.32] 5 [1.32]
11105538	PVE 10 [2.64] 10 [2.64] 10 [2.64] 10 [2.64]	11243967	PVE 10 [2.64] 10 [2.64] 10 [2.64] 10 [2.64]
11105539	PVE 25 [6.60] 25 [6.60] 25 [6.60] 25 [6.60]	11240624	PVE 25 [6.60] 25 [6.60] 25 [6.60] 25 [6.60]
11105540	PVE 40 [10.57] 40 [10.57] 40 [10.57] 40 [10.57]	11240625	PVE 40 [10.57] 40 [10.57] 40 [10.57] 40 [10.57]
11105541	PVE 65 [17.17] 65 [17.17] 65 [17.17] 65 [17.17]	11240632	PVE 65 [17.17] 65 [17.17] 65 [17.17] 65 [17.17]
11109637	PVH/PVHC 5 [1.32] 5 [1.32] 5 [1.32] 5 [1.32]	11274482	PVH/PVHC 5 [1.32] 5 [1.32] 5 [1.32] 5 [1.32]
11109638	PVH/PVHC 10 [2.64] 10 [2.64] 10 [2.64] 10 [2.64]	11274449	PVH/PVHC 10 [2.64] 10 [2.64] 10 [2.64] 10 [2.64]
11109639	PVH/PVHC 25 [6.60] 25 [6.60] 25 [6.60] 25 [6.60]	11274483	PVH/PVHC 25 [6.60] 25 [6.60] 25 [6.60] 25 [6.60]
11109640	PVH/PVHC 40 [10.57] 40 [10.57] 40 [10.57] 40 [10.57]	11274484	PVH/PVHC 40 [10.57] 40 [10.57] 40 [10.57] 40 [10.57]
11109641	PVH/PVHC 65 [17.17] 65 [17.17] 65 [17.17] 65 [17.17]	11274467	PVH/PVHC 65 [17.17] 65 [17.17] 65 [17.17] 65 [17.17]
11160953	PVE 5 [1.32] 5 [1.32] 2.5 [0.66] 2.5 [0.66]	11295512	PVE 5 [1.32] 5 [1.32] 2.5 [0.66] 2.5 [0.66]
11160954	PVE 10 [2.64] 10 [2.64] 5 [1.32] 5 [1.32]	11295513	PVE 10 [2.64] 10 [2.64] 5 [1.32] 5 [1.32]
11159472	PVE 5 [1.32] 5 [1.32] 5 [1.32] 5 [1.32]	11295487	PVE 5 [1.32] 5 [1.32] 5 [1.32] 5 [1.32]
11159474	PVE 10 [2.64] 10 [2.64] 25 [6.60] 25 [6.60]	11295514	PVE 10 [2.64] 10 [2.64] 25 [6.60] 25 [6.60]
11156160	PVE 15 [3.96] 15 [3.96] 25 [6.60] 25 [6.60]	11295489	PVE 15 [3.96] 15 [3.96] 25 [6.60] 25 [6.60]
11156158	PVE 25 [6.60] 25 [6.60] 40 [10.57] 40 [10.57]	11295490	PVE 25 [6.60] 25 [6.60] 40 [10.57] 40 [10.57]
11160957	PVE 40 [10.57] 40 [10.57] 25 [6.60] 25 [6.60]	*11309231	PVE 40 [10.57] 40 [10.57] 25 [6.60] 25 [6.60]
11156155	PVE 40 [10.57] 40 [10.57] 65 [17.17] 65 [17.17]	11295503	PVE 40 [10.57] 40 [10.57] 65 [17.17] 65 [17.17]
11189195	PVH/PVHC 15 [3.96] 15 [3.96] 25 [6.60] 25 [6.60]	11295457	PVH/PVHC 15 [3.96] 15 [3.96] 25 [6.60] 25 [6.60]
11105532	PVE 5 [1.32] 5 [1.32] 5 [1.32] 5 [1.32]	11274390	PVE 5 [1.32] 5 [1.32] 5 [1.32] 5 [1.32]
11105533	PVE 10 [2.64] 10 [2.64] 10 [2.64] 10 [2.64]	11266923	PVE 10 [2.64] 10 [2.64] 10 [2.64] 10 [2.64]
11179972	PVE 15 [3.96] 15 [3.96] 15 [3.96] 15 [3.96]	11295491	PVE 15 [3.96] 15 [3.96] 15 [3.96] 15 [3.96]
11105534	PVE 25 [6.60] 25 [6.60] 25 [6.60] 25 [6.60]	11263594	PVE 25 [6.60] 25 [6.60] 25 [6.60] 25 [6.60]
11105535	PVE 40 [10.57] 40 [10.57] 40 [10.57] 40 [10.57]	11263595	PVE 40 [10.57] 40 [10.57] 40 [10.57] 40 [10.57]
11105536	PVE 65 [17.17] 65 [17.17] 65 [17.17] 65 [17.17]	11274474	PVE 65 [17.17] 65 [17.17] 65 [17.17] 65 [17.17]
11109632	PVH/PVHC 5 [1.32] 5 [1.32] 5 [1.32] 5 [1.32]	11274391	PVH/PVHC 5 [1.32] 5 [1.32] 5 [1.32] 5 [1.32]
11109633	PVH/PVHC 10 [2.64] 10 [2.64] 10 [2.64] 10 [2.64]	11274477	PVH/PVHC 10 [2.64] 10 [2.64] 10 [2.64] 10 [2.64]
11109634	PVH/PVHC 25 [6.60] 25 [6.60] 25 [6.60] 25 [6.60]	11274471	PVH/PVHC 25 [6.60] 25 [6.60] 25 [6.60] 25 [6.60]
11109635	PVH/PVHC 40 [10.57] 40 [10.57] 40 [10.57] 40 [10.57]	11274478	PVH/PVHC 40 [10.57] 40 [10.57] 40 [10.57] 40 [10.57]
11109636	PVH/PVHC 65 [17.17] 65 [17.17] 65 [17.17] 65 [17.17]	11274476	PVH/PVHC 65 [17.17] 65 [17.17] 65 [17.17] 65 [17.17]
11109642	PVE 5 [1.32] 5 [1.32] 2.5 [0.66] 2.5 [0.66]	11274479	PVE 5 [1.32] 5 [1.32] 2.5 [0.66] 2.5 [0.66]
11109643	PVE 10 [2.64] 10 [2.64] 5 [1.32] 5 [1.32]	11274493	PVE 10 [2.64] 10 [2.64] 5 [1.32] 5 [1.32]
11156296	PVE 15 [3.96] 15 [3.96] 25 [6.60] 25 [6.60]	11295455	PVE 15 [3.96] 15 [3.96] 25 [6.60] 25 [6.60]
11109644	PVE 25 [6.60] 25 [6.60] 10 [2.64] 10 [2.64]	11274495	PVE 25 [6.60] 25 [6.60] 10 [2.64] 10 [2.64]
11109645	PVE 25 [6.60] 25 [6.60] 15 [3.96] 15 [3.96]	11274496	PVE 25 [6.60] 25 [6.60] 15 [3.96] 15 [3.96]
11156298	PVE 25 [6.60] 25 [6.60] 40 [10.57] 40 [10.57]	11295456	PVE 25 [6.60] 25 [6.60] 40 [10.57] 40 [10.57]
11109646	PVE 40 [10.57] 40 [10.57] 15 [3.96] 15 [3.96]	11274497	PVE 40 [10.57] 40 [10.57] 15 [3.96] 15 [3.96]
11109647	PVE 40 [10.57] 40 [10.57] 25 [6.60] 25 [6.60]	11274485	PVE 40 [10.57] 40 [10.57] 25 [6.60] 25 [6.60]
11109648	PVE 65 [17.17] 65 [17.17] 25 [6.60] 25 [6.60]	11274486	PVE 65 [17.17] 65 [17.17] 25 [6.60] 25 [6.60]

11109649	PVE 65 [17.17] 65 [17.17] 40 [10.57] 40 [10.57]	11274481	PVE 65 [17.17] 65 [17.17] 40 [10.57] 40 [10.57]
11146752	PVH/PVHC 5 [1.32] 5 [1.32] 2.5 [0.66] 2.5 [0.66]	11274480	PVH/PVHC 5 [1.32] 5 [1.32] 2.5 [0.66] 2.5 [0.66]
11146753	PVH/PVHC 10 [2.64] 10 [2.64] 5 [1.32] 5 [1.32]	11295499	PVH/PVHC 10 [2.64] 10 [2.64] 5 [1.32] 5 [1.32]
*11146754	PVH/PVHC 25 [6.60] 25 [6.60] 10 [2.64] 10 [2.64]	11295485	PVH/PVHC 25 [6.60] 25 [6.60] 10 [2.64] 10 [2.64]
11146755	PVH/PVHC 25 [6.60] 25 [6.60] 15 [3.96] 15 [3.96]	11295486	PVH/PVHC 25 [6.60] 25 [6.60] 15 [3.96] 15 [3.96]
11146756	PVH/PVHC 40 [10.57] 40 [10.57] 15 [3.96] 15 [3.96]	11274487	PVH/PVHC 40 [10.57] 40 [10.57] 15 [3.96] 15 [3.96]
11146757	PVH/PVHC 40 [10.57] 40 [10.57] 25 [6.60] 25 [6.60]	11295454	PVH/PVHC 40 [10.57] 40 [10.57] 25 [6.60] 25 [6.60]
11146759	PVH/PVHC 65 [17.17] 65 [17.17] 40 [10.57] 40 [10.57]	11274502	PVH/PVHC 65 [17.17] 65 [17.17] 40 [10.57] 40 [10.57]

Two code numbers were referenced incorrectly and have been updated in the notes below and highlighted above.

Existing number 11160957 was referenced to an incorrect number.
The correct new number for this spool is 11309231.

Existing number 11145754 was entered incorrectly.
Correct existing code number is 11146754.

Tension Bar

With reference to PIB2016-245 and also stated in the PIB to ensure continuous effort to ensure deliveries, the tension bar for PVBS 16 will be set up for dual sourcing.
This change will not have an impact in form, fit and function. As shown below only visually, there will a difference in the two tension bars.

Current Tension Bar



New Tension Bar



Implementation of the new tension bar will be initiated in Q3 2022 together with the new spools for PVB16

For questions or concerns, please contact your local Danfoss Power Solutions representative.

All Failure Mode Effects Analysis (FMEA's) and Control Plans affected by this change have been updated. Dimensional (ISIR), Capability (as required), and Measurement studies have been completed with prototypes and will have been verified with production tooling & processes before executing the change.

Copies of the quality documentation supporting this change are available for review at Danfoss Power Solutions.