

Form 5500 Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Annual Return/Report of Employee Benefit Plan This form is required to be filed for employee benefit plans under sections 104 and 4065 of the Employee Retirement Income Security Act of 1974 (ERISA) and sections 6057(b) and 6058(a) of the Internal Revenue Code (the Code). <p style="text-align: center;">▶ Complete all entries in accordance with the instructions to the Form 5500.</p>	OMB Nos. 1210-0110 1210-0089 <div style="text-align: center; font-size: 1.5em; font-weight: bold;">2017</div> This Form is Open to Public Inspection
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Part I	Annual Report Identification Information
For calendar plan year 2017 or fiscal plan year beginning <u>01/01/2017</u> and ending <u>12/31/2017</u>	
A This return/report is for:	☐ a multiemployer plan ☐ a multiple-employer plan (Filers checking this box must attach a list of participating employer information in accordance with the form instructions.) ☒ a single-employer plan ☐ a DFE (specify) ____
B This return/report is:	☐ the first return/report ☐ the final return/report ☐ an amended return/report ☐ a short plan year return/report (less than 12 months)
C If the plan is a collectively-bargained plan, check here.	☒
D Check box if filing under:	☒ Form 5558 ☐ automatic extension ☐ the DFVC program ☐ special extension (enter description)

Part II	Basic Plan Information—enter all requested information				
1a Name of plan <u>PENTAIR PUMP GROUP, INC. BARGAINING UNIT EMPLOYEES PENSION PLAN</u>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">1b Three-digit plan number (PN) ▶</td> <td style="width: 20%; text-align: center;"><u>002</u></td> </tr> <tr> <td colspan="2">1c Effective date of plan <u>04/01/1954</u></td> </tr> </table>	1b Three-digit plan number (PN) ▶	<u>002</u>	1c Effective date of plan <u>04/01/1954</u>	
1b Three-digit plan number (PN) ▶	<u>002</u>				
1c Effective date of plan <u>04/01/1954</u>					
2a Plan sponsor's name (employer, if for a single-employer plan) Mailing address (include room, apt., suite no. and street, or P.O. Box) City or town, state or province, country, and ZIP or foreign postal code (if foreign, see instructions) <u>PENTAIR FLOW TECHNOLOGIES, LLC</u> <u>C/O PENTAIR, INC.</u> <u>5500 WAYZATA BOULEVARD, SUITE 800</u> <u>GOLDEN VALLEY, MN 55416-1261</u>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>2b Employer Identification Number (EIN) <u>41-1881858</u></td> </tr> <tr> <td>2c Plan Sponsor's telephone number <u>763-545-1730</u></td> </tr> <tr> <td>2d Business code (see instructions) <u>333200</u></td> </tr> </table>	2b Employer Identification Number (EIN) <u>41-1881858</u>	2c Plan Sponsor's telephone number <u>763-545-1730</u>	2d Business code (see instructions) <u>333200</u>	
2b Employer Identification Number (EIN) <u>41-1881858</u>					
2c Plan Sponsor's telephone number <u>763-545-1730</u>					
2d Business code (see instructions) <u>333200</u>					

Caution: A penalty for the late or incomplete filing of this return/report will be assessed unless reasonable cause is established.

Under penalties of perjury and other penalties set forth in the instructions, I declare that I have examined this return/report, including accompanying schedules, statements and attachments, as well as the electronic version of this return/report, and to the best of my knowledge and belief, it is true, correct, and complete.

SIGN HERE	Filed with authorized/valid electronic signature.	10/04/2018	DIANA SOLOMON, SR. DIR GLO BENEFITS
	Signature of plan administrator	Date	Enter name of individual signing as plan administrator
SIGN HERE	Filed with authorized/valid electronic signature.	10/04/2018	MARK C. BORIN, CFO
	Signature of employer/plan sponsor	Date	Enter name of individual signing as employer or plan sponsor
SIGN HERE			
	Signature of DFE	Date	Enter name of individual signing as DFE

For Paperwork Reduction Act Notice, see the Instructions for Form 5500.

Form 5500 (2017)
v. 170203

3a Plan administrator's name and address ☒ Same as Plan Sponsor	3b Administrator's EIN 3c Administrator's telephone number <div style="background-color: #cccccc; height: 40px; width: 100%;"></div>
4 If the name and/or EIN of the plan sponsor or the plan name has changed since the last return/report filed for this plan, enter the plan sponsor's name, EIN, the plan name and the plan number from the last return/report: a Sponsor's name c Plan Name	4b EIN 4d PN
5 Total number of participants at the beginning of the plan year	5 549
6 Number of participants as of the end of the plan year unless otherwise stated (welfare plans complete only lines 6a(1) , 6a(2) , 6b , 6c , and 6d).	
a(1) Total number of active participants at the beginning of the plan year	6a(1) 325
a(2) Total number of active participants at the end of the plan year	6a(2) 301
b Retired or separated participants receiving benefits	6b 82
c Other retired or separated participants entitled to future benefits	6c 148
d Subtotal. Add lines 6a(2) , 6b , and 6c	6d 531
e Deceased participants whose beneficiaries are receiving or are entitled to receive benefits.	6e 19
f Total. Add lines 6d and 6e	6f 550
g Number of participants with account balances as of the end of the plan year (only defined contribution plans complete this item)	6g
h Number of participants who terminated employment during the plan year with accrued benefits that were less than 100% vested	6h 7
7 Enter the total number of employers obligated to contribute to the plan (only multiemployer plans complete this item).....	7

8a If the plan provides pension benefits, enter the applicable pension feature codes from the List of Plan Characteristics Codes in the instructions:

1B 3H

b If the plan provides welfare benefits, enter the applicable welfare feature codes from the List of Plan Characteristics Codes in the instructions:

9a Plan funding arrangement (check all that apply) (1) ☐ Insurance (2) ☐ Code section 412(e)(3) insurance contracts (3) ☒ Trust (4) ☐ General assets of the sponsor	9b Plan benefit arrangement (check all that apply) (1) ☐ Insurance (2) ☐ Code section 412(e)(3) insurance contracts (3) ☒ Trust (4) ☐ General assets of the sponsor
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10 Check all applicable boxes in 10a and 10b to indicate which schedules are attached, and, where indicated, enter the number attached. (See instructions)

a Pension Schedules

- (1)** ☒ **R** (Retirement Plan Information)
- (2)** ☐ **MB** (Multiemployer Defined Benefit Plan and Certain Money Purchase Plan Actuarial Information) - signed by the plan actuary
- (3)** ☒ **SB** (Single-Employer Defined Benefit Plan Actuarial Information) - signed by the plan actuary

b General Schedules

- (1)** ☒ **H** (Financial Information)
- (2)** ☐ **I** (Financial Information – Small Plan)
- (3)** ☐ **A** (Insurance Information)
- (4)** ☒ **C** (Service Provider Information)
- (5)** ☒ **D** (DFE/Participating Plan Information)
- (6)** ☐ **G** (Financial Transaction Schedules)

Part III Form M-1 Compliance Information (to be completed by welfare benefit plans)

11a If the plan provides welfare benefits, was the plan subject to the Form M-1 filing requirements during the plan year? (See instructions and 29 CFR 2520.101-2.) ☐ Yes ☐ No

If "Yes" is checked, complete lines 11b and 11c.

11b Is the plan currently in compliance with the Form M-1 filing requirements? (See instructions and 29 CFR 2520.101-2.) ☐ Yes ☐ No

11c Enter the Receipt Confirmation Code for the 2017 Form M-1 annual report. If the plan was not required to file the 2017 Form M-1 annual report, enter the Receipt Confirmation Code for the most recent Form M-1 that was required to be filed under the Form M-1 filing requirements. (Failure to enter a valid Receipt Confirmation Code will subject the Form 5500 filing to rejection as incomplete.)

Receipt Confirmation Code _____

<div>SCHEDULE SB (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation</div>	<div>Single-Employer Defined Benefit Plan Actuarial Information</div> <div>This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6059 of the Internal Revenue Code (the Code).</div> <div>▶ File as an attachment to Form 5500 or 5500-SF.</div>	<div>OMB No. 1210-0110</div> <div>2017</div> <div>This Form is Open to Public Inspection</div>
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For calendar plan year 2017 or fiscal plan year beginning 01/01/2017 and ending 12/31/2017

▶ Round off amounts to nearest dollar.
▶ Caution: A penalty of \$1,000 will be assessed for late filing of this report unless reasonable cause is established.

A Name of plan PENTAIR PUMP GROUP, INC. BARGAINING UNIT EMPLOYEES PENSION PLAN	B Three-digit plan number (PN) ▶ 002
C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF PENTAIR FLOW TECHNOLOGIES, LLC	D Employer Identification Number (EIN) 41-1881858

E Type of plan: ☒ Single ☐ Multiple-A ☐ Multiple-B	F Prior year plan size: ☐ 100 or fewer ☐ 101-500 ☒ More than 500
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Part I	Basic Information
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1 Enter the valuation date: Month 01 Day 01 Year 2017			
2 Assets:			
a Market value	2a	17549803	
b Actuarial value	2b	17454937	
3 Funding target/participant count breakdown	(1) Number of participants	(2) Vested Funding Target	(3) Total Funding Target
a For retired participants and beneficiaries receiving payment	78	3527339	3527339
b For terminated vested participants	146	2223724	2223724
c For active participants	325	7748332	7828430
d Total	549	13499395	13579493
4 If the plan is in at-risk status, check the box and complete lines (a) and (b)..... ☐			
a Funding target disregarding prescribed at-risk assumptions	4a		
b Funding target reflecting at-risk assumptions, but disregarding transition rule for plans that have been in at-risk status for fewer than five consecutive years and disregarding loading factor	4b		
5 Effective interest rate	5	6.03 %	
6 Target normal cost	6	568860	

Statement by Enrolled Actuary
To the best of my knowledge, the information supplied in this schedule and accompanying schedules, statements and attachments, if any, is complete and accurate. Each prescribed assumption was applied in accordance with applicable law and regulations. In my opinion, each other assumption is reasonable (taking into account the experience of the plan and reasonable expectations) and such other assumptions, in combination, offer my best estimate of anticipated experience under the plan.

SIGN HERE		
Signature of actuary	09/25/2018	Date
GREGORY T. TRAPP, ASA, EA, MAAA	17-05207	Most recent enrollment number
MERCER	612-642-8600	Telephone number (including area code)
Firm name		
333 SOUTH 7TH STREET, SUITE 1400 MINNEAPOLIS, MN 55402-2427		
Address of the firm		

If the actuary has not fully reflected any regulation or ruling promulgated under the statute in completing this schedule, check the box and see instructions ☐

Part II Beginning of Year Carryover and Prefunding Balances

	(a) Carryover balance	(b) Prefunding balance
7 Balance at beginning of prior year after applicable adjustments (line 13 from prior year)	0	5362384
8 Portion elected for use to offset prior year's funding requirement (line 35 from prior year)	0	814822
9 Amount remaining (line 7 minus line 8)	0	4547562
10 Interest on line 9 using prior year's actual return of <u>8.44</u> %	0	383814
11 Prior year's excess contributions to be added to prefunding balance:		
a Present value of excess contributions (line 38a from prior year)		0
b(1) Interest on the excess, if any, of line 38a over line 38b from prior year Schedule SB, using prior year's effective interest rate of <u>6.23</u> %		0
b(2) Interest on line 38b from prior year Schedule SB, using prior year's actual return		0
c Total available at beginning of current plan year to add to prefunding balance		0
d Portion of (c) to be added to prefunding balance		0
12 Other reductions in balances due to elections or deemed elections		
13 Balance at beginning of current year (line 9 + line 10 + line 11d – line 12)	0	4931376

Part III Funding Percentages

14 Funding target attainment percentage	14	92.22%
15 Adjusted funding target attainment percentage	15	128.53%
16 Prior year's funding percentage for purposes of determining whether carryover/prefunding balances may be used to reduce current year's funding requirement	16	88.94%
17 If the current value of the assets of the plan is less than 70 percent of the funding target, enter such percentage.	17	%

Part IV Contributions and Liquidity Shortfalls**18** Contributions made to the plan for the plan year by employer(s) and employees:

(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees	(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees
09/10/2018	710000	0			
Totals ▶			18(b)	710000	18(c) 0

19 Discounted employer contributions – see instructions for small plan with a valuation date after the beginning of the year:

a Contributions allocated toward unpaid minimum required contributions from prior years.	19a	0
b Contributions made to avoid restrictions adjusted to valuation date	19b	0
c Contributions allocated toward minimum required contribution for current year adjusted to valuation date	19c	643092

20 Quarterly contributions and liquidity shortfalls:

- a** Did the plan have a "funding shortfall" for the prior year? ☒ Yes ☐ No
- b** If line 20a is "Yes," were required quarterly installments for the current year made in a timely manner? ☐ Yes ☒ No
- c** If line 20a is "Yes," see instructions and complete the following table as applicable:

Liquidity shortfall as of end of quarter of this plan year			
(1) 1st	(2) 2nd	(3) 3rd	(4) 4th
0	0	0	0

Part V Assumptions Used to Determine Funding Target and Target Normal Cost

21 Discount rate:				
a Segment rates:	1st segment: 4.16 %	2nd segment: 5.72 %	3rd segment: 6.48 %	☐ N/A, full yield curve used
b Applicable month (enter code)				21b 4
22 Weighted average retirement age.....				22 65
23 Mortality table(s) (see instructions) ☐ Prescribed - combined ☒ Prescribed - separate ☐ Substitute				

Part VI Miscellaneous Items

24 Has a change been made in the non-prescribed actuarial assumptions for the current plan year? If "Yes," see instructions regarding required attachment	☒ Yes ☐ No
25 Has a method change been made for the current plan year? If "Yes," see instructions regarding required attachment.....	☐ Yes ☒ No
26 Is the plan required to provide a Schedule of Active Participants? If "Yes," see instructions regarding required attachment.....	☒ Yes ☐ No
27 If the plan is subject to alternative funding rules, enter applicable code and see instructions regarding attachment	27

Part VII Reconciliation of Unpaid Minimum Required Contributions For Prior Years

28 Unpaid minimum required contributions for all prior years	28	0
29 Discounted employer contributions allocated toward unpaid minimum required contributions from prior years (line 19a)	29	0
30 Remaining amount of unpaid minimum required contributions (line 28 minus line 29)	30	0

Part VIII Minimum Required Contribution For Current Year

31 Target normal cost and excess assets (see instructions):			
a Target normal cost (line 6)	31a	568860	
b Excess assets, if applicable, but not greater than line 31a	31b	0	
32 Amortization installments:	Outstanding Balance	Installment	
a Net shortfall amortization installment.....	1055932	226236	
b Waiver amortization installment	0	0	
33 If a waiver has been approved for this plan year, enter the date of the ruling letter granting the approval (Month _____ Day _____ Year _____) and the waived amount	33		
34 Total funding requirement before reflecting carryover/prefunding balances (lines 31a - 31b + 32a + 32b - 33).....	34	795096	
	Carryover balance	Prefunding balance	Total balance
35 Balances elected for use to offset funding requirement.....	0	795096	795096
36 Additional cash requirement (line 34 minus line 35)	36	0	
37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c)	37	643092	
38 Present value of excess contributions for current year (see instructions)			
a Total (excess, if any, of line 37 over line 36)	38a	643092	
b Portion included in line 38a attributable to use of prefunding and funding standard carryover balances	38b	643092	
39 Unpaid minimum required contribution for current year (excess, if any, of line 36 over line 37)	39	0	
40 Unpaid minimum required contributions for all years.....	40	0	

Part IX Pension Funding Relief Under Pension Relief Act of 2010 (See Instructions)

41 If an election was made to use PRA 2010 funding relief for this plan:			
a Schedule elected	☐ 2 plus 7 years ☐ 15 years		
b Eligible plan year(s) for which the election in line 41a was made	☐ 2008 ☐ 2009 ☐ 2010 ☐ 2011		
42 Amount of acceleration adjustment	42		
43 Excess installment acceleration amount to be carried over to future plan years	43		

SCHEDULE C (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Service Provider Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA). ▶ File as an attachment to Form 5500.	OMB No. 1210-0110
		2017
		This Form is Open to Public Inspection.

For calendar plan year 2017 or fiscal plan year beginning 01/01/2017 and ending 12/31/2017		
A Name of plan PENTAIR PUMP GROUP, INC. BARGAINING UNIT EMPLOYEES PENSION PLAN	B Three-digit plan number (PN) ▶	002
C Plan sponsor's name as shown on line 2a of Form 5500 PENTAIR FLOW TECHNOLOGIES, LLC	D Employer Identification Number (EIN) 41-1881858	

Part I	Service Provider Information (see instructions)
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You must complete this Part, in accordance with the instructions, to report the information required for **each person** who received, directly or indirectly, \$5,000 or more in total compensation (i.e., money or anything else of monetary value) in connection with services rendered to the plan or the person's position with the plan during the plan year. If a person received **only** eligible indirect compensation for which the plan received the required disclosures, you are required to answer line 1 but are not required to include that person when completing the remainder of this Part.

1 Information on Persons Receiving Only Eligible Indirect Compensation

- a** Check "Yes" or "No" to indicate whether you are excluding a person from the remainder of this Part because they received only eligible indirect compensation for which the plan received the required disclosures (see instructions for definitions and conditions).. ☐ Yes ☒ No
- b** If you answered line 1a "Yes," enter the name and EIN or address of each person providing the required disclosures for the service providers who received only eligible indirect compensation. Complete as many entries as needed (see instructions).

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation
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2. Information on Other Service Providers Receiving Direct or Indirect Compensation. Except for those persons for whom you answered "Yes" to line 1a above, complete as many entries as needed to list each person receiving, directly or indirectly, \$5,000 or more in total compensation (i.e., money or anything else of value) in connection with services rendered to the plan or their position with the plan during the plan year. (See instructions).

(a) Enter name and EIN or address (see instructions)

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
			Yes ☐ No ☐	Yes ☐ No ☐		Yes ☐ No ☐

(a) Enter name and EIN or address (see instructions)

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
			Yes ☐ No ☐	Yes ☐ No ☐		Yes ☐ No ☐

(a) Enter name and EIN or address (see instructions)

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
			Yes ☐ No ☐	Yes ☐ No ☐		Yes ☐ No ☐

2. Information on Other Service Providers Receiving Direct or Indirect Compensation. Except for those persons for whom you answered "Yes" to line 1a above, complete as many entries as needed to list each person receiving, directly or indirectly, \$5,000 or more in total compensation (i.e., money or anything else of value) in connection with services rendered to the plan or their position with the plan during the plan year. (See instructions).

(a) Enter name and EIN or address (see instructions)

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
			Yes ☐ No ☐	Yes ☐ No ☐		Yes ☐ No ☐

(a) Enter name and EIN or address (see instructions)

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
			Yes ☐ No ☐	Yes ☐ No ☐		Yes ☐ No ☐

(a) Enter name and EIN or address (see instructions)

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
			Yes ☐ No ☐	Yes ☐ No ☐		Yes ☐ No ☐

Part I Service Provider Information (continued)

3. If you reported on line 2 receipt of indirect compensation, other than eligible indirect compensation, by a service provider, and the service provider is a fiduciary or provides contract administrator, consulting, custodial, investment advisory, investment management, broker, or recordkeeping services, answer the following questions for (a) each source from whom the service provider received \$1,000 or more in indirect compensation and (b) each source for whom the service provider gave you a formula used to determine the indirect compensation instead of an amount or estimated amount of the indirect compensation. Complete as many entries as needed to report the required information for each source.

(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
(d) Enter name and EIN (address) of source of indirect compensation	(e) Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
(d) Enter name and EIN (address) of source of indirect compensation	(e) Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
(d) Enter name and EIN (address) of source of indirect compensation	(e) Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.	

Part II Service Providers Who Fail or Refuse to Provide Information

4 Provide, to the extent possible, the following information for each service provider who failed or refused to provide the information necessary to complete this Schedule.

(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide
(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide
(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide
(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide
(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide
(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide

Part III Termination Information on Accountants and Enrolled Actuaries (see instructions)
(complete as many entries as needed)

a Name:	b EIN:
c Position:	
d Address:	e Telephone:

Explanation:

a Name:	b EIN:
c Position:	
d Address:	e Telephone:

Explanation:

a Name:	b EIN:
c Position:	
d Address:	e Telephone:

Explanation:

a Name:	b EIN:
c Position:	
d Address:	e Telephone:

Explanation:

a Name:	b EIN:
c Position:	
d Address:	e Telephone:

Explanation:

<p style="text-align: center;">SCHEDULE D (Form 5500)</p> <p style="text-align: center; font-size: small;">Department of the Treasury Internal Revenue Service</p> <hr/> <p style="text-align: center; font-size: small;">Department of Labor Employee Benefits Security Administration</p>	<p style="text-align: center;">DFE/Participating Plan Information</p> <p style="text-align: center; font-size: small;">This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA).</p> <p style="text-align: center;">▶ File as an attachment to Form 5500.</p>	<p style="text-align: center; font-size: small;">OMB No. 1210-0110</p> <hr/> <p style="text-align: center; font-size: large;">2017</p> <hr/> <p style="text-align: center; font-size: small;">This Form is Open to Public Inspection.</p>
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For calendar plan year 2017 or fiscal plan year beginning 01/01/2017 and ending 12/31/2017

<p>A Name of plan <u>PENTAIR PUMP GROUP, INC. BARGAINING UNIT EMPLOYEES PENSION PLAN</u></p>	<p>B Three-digit plan number (PN) ▶ <u>002</u></p>	
<p>C Plan or DFE sponsor's name as shown on line 2a of Form 5500 <u>PENTAIR FLOW TECHNOLOGIES, LLC</u></p>	<p>D Employer Identification Number (EIN) <u>41-1881858</u></p>	

Part I	Information on interests in MTIAs, CCTs, PSAs, and 103-12 IEs (to be completed by plans and DFEs) (Complete as many entries as needed to report all interests in DFEs)
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<p>a Name of MTIA, CCT, PSA, or 103-12 IE: <u>PENTAIR, INC. MASTER TRUST</u></p>		
<p>b Name of sponsor of entity listed in (a): <u>PENTAIR, INC.</u></p>		
<p>c EIN-PN <u>25-6346358-001</u></p>	<p>d Entity code <u>M</u></p>	<p>e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) <u>19099590</u></p>
<p>a Name of MTIA, CCT, PSA, or 103-12 IE:</p>		
<p>b Name of sponsor of entity listed in (a):</p>		
<p>c EIN-PN</p>	<p>d Entity code</p>	<p>e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)</p>
<p>a Name of MTIA, CCT, PSA, or 103-12 IE:</p>		
<p>b Name of sponsor of entity listed in (a):</p>		
<p>c EIN-PN</p>	<p>d Entity code</p>	<p>e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)</p>
<p>a Name of MTIA, CCT, PSA, or 103-12 IE:</p>		
<p>b Name of sponsor of entity listed in (a):</p>		
<p>c EIN-PN</p>	<p>d Entity code</p>	<p>e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)</p>
<p>a Name of MTIA, CCT, PSA, or 103-12 IE:</p>		
<p>b Name of sponsor of entity listed in (a):</p>		
<p>c EIN-PN</p>	<p>d Entity code</p>	<p>e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)</p>
<p>a Name of MTIA, CCT, PSA, or 103-12 IE:</p>		
<p>b Name of sponsor of entity listed in (a):</p>		
<p>c EIN-PN</p>	<p>d Entity code</p>	<p>e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)</p>
<p>a Name of MTIA, CCT, PSA, or 103-12 IE:</p>		
<p>b Name of sponsor of entity listed in (a):</p>		
<p>c EIN-PN</p>	<p>d Entity code</p>	<p>e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)</p>

a Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):**c** EIN-PN**d** Entity
code**e** Dollar value of interest in MTIA, CCT, PSA, or
103-12 IE at end of year (see instructions)**a** Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):**c** EIN-PN**d** Entity
code**e** Dollar value of interest in MTIA, CCT, PSA, or
103-12 IE at end of year (see instructions)**a** Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):**c** EIN-PN**d** Entity
code**e** Dollar value of interest in MTIA, CCT, PSA, or
103-12 IE at end of year (see instructions)**a** Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):**c** EIN-PN**d** Entity
code**e** Dollar value of interest in MTIA, CCT, PSA, or
103-12 IE at end of year (see instructions)**a** Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):**c** EIN-PN**d** Entity
code**e** Dollar value of interest in MTIA, CCT, PSA, or
103-12 IE at end of year (see instructions)**a** Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):**c** EIN-PN**d** Entity
code**e** Dollar value of interest in MTIA, CCT, PSA, or
103-12 IE at end of year (see instructions)**a** Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):**c** EIN-PN**d** Entity
code**e** Dollar value of interest in MTIA, CCT, PSA, or
103-12 IE at end of year (see instructions)**a** Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):**c** EIN-PN**d** Entity
code**e** Dollar value of interest in MTIA, CCT, PSA, or
103-12 IE at end of year (see instructions)**a** Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):**c** EIN-PN**d** Entity
code**e** Dollar value of interest in MTIA, CCT, PSA, or
103-12 IE at end of year (see instructions)**a** Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):**c** EIN-PN**d** Entity
code**e** Dollar value of interest in MTIA, CCT, PSA, or
103-12 IE at end of year (see instructions)

Part II Information on Participating Plans (to be completed by DFEs)

(Complete as many entries as needed to report all participating plans)

a Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN

SCHEDULE H (Form 5500) <small>Department of the Treasury Internal Revenue Service</small> <small>Department of Labor Employee Benefits Security Administration</small> <small>Pension Benefit Guaranty Corporation</small>	Financial Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA), and section 6058(a) of the Internal Revenue Code (the Code). ► File as an attachment to Form 5500.	OMB No. 1210-0110 2017 This Form is Open to Public Inspection
For calendar plan year 2017 or fiscal plan year beginning <u>01/01/2017</u> and ending <u>12/31/2017</u>		
A Name of plan <u>PENTAIR PUMP GROUP, INC. BARGAINING UNIT EMPLOYEES PENSION PLAN</u>	B Three-digit plan number (PN) ►	<u>002</u>
C Plan sponsor's name as shown on line 2a of Form 5500 <u>PENTAIR FLOW TECHNOLOGIES, LLC</u>	D Employer Identification Number (EIN) <u>41-1881858</u>	

Part I	Asset and Liability Statement		(a) Beginning of Year	(b) End of Year
1 Current value of plan assets and liabilities at the beginning and end of the plan year. Combine the value of plan assets held in more than one trust. Report the value of the plan's interest in a commingled fund containing the assets of more than one plan on a line-by-line basis unless the value is reportable on lines 1c(9) through 1c(14). Do not enter the value of that portion of an insurance contract which guarantees, during this plan year, to pay a specific dollar benefit at a future date. Round off amounts to the nearest dollar. MTIAs, CCTs, PSAs, and 103-12 IEs do not complete lines 1b(1), 1b(2), 1c(8), 1g, 1h, and 1i. CCTs, PSAs, and 103-12 IEs also do not complete lines 1d and 1e. See instructions.				
	Assets			
a	Total noninterest-bearing cash	1a		
b	Receivables (less allowance for doubtful accounts):			
	(1) Employer contributions	1b(1)		
	(2) Participant contributions	1b(2)		
	(3) Other.....	1b(3)		
c	General investments:			
	(1) Interest-bearing cash (include money market accounts & certificates of deposit)	1c(1)		
	(2) U.S. Government securities.....	1c(2)		
	(3) Corporate debt instruments (other than employer securities):			
	(A) Preferred	1c(3)(A)		
	(B) All other.....	1c(3)(B)		
	(4) Corporate stocks (other than employer securities):			
	(A) Preferred	1c(4)(A)		
	(B) Common	1c(4)(B)		
	(5) Partnership/joint venture interests	1c(5)		
	(6) Real estate (other than employer real property)	1c(6)		
	(7) Loans (other than to participants)	1c(7)		
	(8) Participant loans	1c(8)		
	(9) Value of interest in common/collective trusts.....	1c(9)		
	(10) Value of interest in pooled separate accounts.....	1c(10)		
	(11) Value of interest in master trust investment accounts	1c(11)	17549803	19099590
	(12) Value of interest in 103-12 investment entities	1c(12)		
	(13) Value of interest in registered investment companies (e.g., mutual funds).....	1c(13)		
	(14) Value of funds held in insurance company general account (unallocated contracts).....	1c(14)		
	(15) Other	1c(15)		

		(a) Beginning of Year	(b) End of Year
1d	Employer-related investments:		
(1)	Employer securities	1d(1)	
(2)	Employer real property	1d(2)	
e	Buildings and other property used in plan operation	1e	
f	Total assets (add all amounts in lines 1a through 1e)	1f	17549803 19099590
Liabilities			
g	Benefit claims payable	1g	
h	Operating payables	1h	
i	Acquisition indebtedness	1i	
j	Other liabilities	1j	
k	Total liabilities (add all amounts in lines 1g through 1j)	1k	0 0
Net Assets			
l	Net assets (subtract line 1k from line 1f)	1l	17549803 19099590

Part II Income and Expense Statement

2 Plan income, expenses, and changes in net assets for the year. Include all income and expenses of the plan, including any trust(s) or separately maintained fund(s) and any payments/receipts to/from insurance carriers. Round off amounts to the nearest dollar. MTIAs, CCTs, PSAs, and 103-12 IEs do not complete lines 2a, 2b(1)(E), 2e, 2f, and 2g.

		(a) Amount	(b) Total
a	Contributions:		
(1)	Received or receivable in cash from: (A) Employers	2a(1)(A)	
	(B) Participants	2a(1)(B)	
	(C) Others (including rollovers)	2a(1)(C)	
(2)	Noncash contributions	2a(2)	
(3)	Total contributions. Add lines 2a(1)(A) , (B) , (C) , and line 2a(2)	2a(3)	0
b	Earnings on investments:		
(1)	Interest:		
	(A) Interest-bearing cash (including money market accounts and certificates of deposit)	2b(1)(A)	
	(B) U.S. Government securities	2b(1)(B)	
	(C) Corporate debt instruments	2b(1)(C)	
	(D) Loans (other than to participants)	2b(1)(D)	
	(E) Participant loans	2b(1)(E)	
	(F) Other	2b(1)(F)	
	(G) Total interest. Add lines 2b(1)(A) through (F)	2b(1)(G)	0
(2)	Dividends: (A) Preferred stock	2b(2)(A)	
	(B) Common stock	2b(2)(B)	
	(C) Registered investment company shares (e.g. mutual funds)	2b(2)(C)	
	(D) Total dividends. Add lines 2b(2)(A) , (B) , and (C)	2b(2)(D)	0
(3)	Rents	2b(3)	
(4)	Net gain (loss) on sale of assets: (A) Aggregate proceeds	2b(4)(A)	
	(B) Aggregate carrying amount (see instructions)	2b(4)(B)	
	(C) Subtract line 2b(4)(B) from line 2b(4)(A) and enter result	2b(4)(C)	0
(5)	Unrealized appreciation (depreciation) of assets: (A) Real estate	2b(5)(A)	
	(B) Other	2b(5)(B)	
	(C) Total unrealized appreciation of assets. Add lines 2b(5)(A) and (B)	2b(5)(C)	0

		(a) Amount	(b) Total
(6) Net investment gain (loss) from common/collective trusts	2b(6)		
(7) Net investment gain (loss) from pooled separate accounts	2b(7)		
(8) Net investment gain (loss) from master trust investment accounts	2b(8)		2166104
(9) Net investment gain (loss) from 103-12 investment entities	2b(9)		
(10) Net investment gain (loss) from registered investment companies (e.g., mutual funds).....	2b(10)		
c Other income	2c		
d Total income. Add all income amounts in column (b) and enter total.....	2d		2166104

Expenses

e Benefit payment and payments to provide benefits:			
(1) Directly to participants or beneficiaries, including direct rollovers.....	2e(1)	578436	
(2) To insurance carriers for the provision of benefits	2e(2)		
(3) Other	2e(3)		
(4) Total benefit payments. Add lines 2e(1) through (3).....	2e(4)		578436
f Corrective distributions (see instructions)	2f		
g Certain deemed distributions of participant loans (see instructions).....	2g		
h Interest expense.....	2h		
i Administrative expenses: (1) Professional fees	2i(1)		
(2) Contract administrator fees	2i(2)		
(3) Investment advisory and management fees	2i(3)		
(4) Other	2i(4)	37881	
(5) Total administrative expenses. Add lines 2i(1) through (4).....	2i(5)		37881
j Total expenses. Add all expense amounts in column (b) and enter total.....	2j		616317

Net Income and Reconciliation

k Net income (loss). Subtract line 2j from line 2d	2k		1549787
l Transfers of assets:			
(1) To this plan.....	2l(1)		
(2) From this plan	2l(2)		

Part III Accountant's Opinion

3 Complete lines 3a through 3c if the opinion of an independent qualified public accountant is attached to this Form 5500. Complete line 3d if an opinion is not attached.

a The attached opinion of an independent qualified public accountant for this plan is (see instructions):

(1) ☐ Unqualified (2) ☐ Qualified (3) ☒ Disclaimer (4) ☐ Adverse

b Did the accountant perform a limited scope audit pursuant to 29 CFR 2520.103-8 and/or 103-12(d)?

☒ Yes ☐ No

c Enter the name and EIN of the accountant (or accounting firm) below:

(1) Name: **DELOITTE & TOUCHE**

(2) EIN: **13-3891517**

d The opinion of an independent qualified public accountant is **not attached** because:

(1) ☐ This form is filed for a CCT, PSA, or MTIA. (2) ☐ It will be attached to the next Form 5500 pursuant to 29 CFR 2520.104-50.

Part IV Compliance Questions

4 CCTs and PSAs do not complete Part IV. MTIAs, 103-12 IEs, and GIAs do not complete lines 4a, 4e, 4f, 4g, 4h, 4k, 4m, 4n, or 5. 103-12 IEs also do not complete lines 4j and 4l. MTIAs also do not complete line 4l.

During the plan year:

a Was there a failure to transmit to the plan any participant contributions within the time period described in 29 CFR 2510.3-102? Continue to answer "Yes" for any prior year failures until fully corrected. (See instructions and DOL's Voluntary Fiduciary Correction Program.).....

b Were any loans by the plan or fixed income obligations due the plan in default as of the close of the plan year or classified during the year as uncollectible? Disregard participant loans secured by participant's account balance. (Attach Schedule G (Form 5500) Part I if "Yes" is checked.)

	Yes	No	Amount
4a		X	
4b		X	

		Yes	No	Amount
c Were any leases to which the plan was a party in default or classified during the year as uncollectible? (Attach Schedule G (Form 5500) Part II if "Yes" is checked.)	4c		X	
d Were there any nonexempt transactions with any party-in-interest? (Do not include transactions reported on line 4a. Attach Schedule G (Form 5500) Part III if "Yes" is checked.)	4d		X	
e Was this plan covered by a fidelity bond?	4e	X		15000000
f Did the plan have a loss, whether or not reimbursed by the plan's fidelity bond, that was caused by fraud or dishonesty?	4f		X	
g Did the plan hold any assets whose current value was neither readily determinable on an established market nor set by an independent third party appraiser?	4g		X	
h Did the plan receive any noncash contributions whose value was neither readily determinable on an established market nor set by an independent third party appraiser?	4h		X	
i Did the plan have assets held for investment? (Attach schedule(s) of assets if "Yes" is checked, and see instructions for format requirements.)	4i		X	
j Were any plan transactions or series of transactions in excess of 5% of the current value of plan assets? (Attach schedule of transactions if "Yes" is checked, and see instructions for format requirements.)	4j		X	
k Were all the plan assets either distributed to participants or beneficiaries, transferred to another plan, or brought under the control of the PBGC?	4k		X	
l Has the plan failed to provide any benefit when due under the plan?	4l		X	
m If this is an individual account plan, was there a blackout period? (See instructions and 29 CFR 2520.101-3.)	4m			
n If 4m was answered "Yes," check the "Yes" box if you either provided the required notice or one of the exceptions to providing the notice applied under 29 CFR 2520.101-3.	4n			

5a Has a resolution to terminate the plan been adopted during the plan year or any prior plan year?..... ☐ Yes ☒ No
 If "Yes," enter the amount of any plan assets that reverted to the employer this year _____.

5b If, during this plan year, any assets or liabilities were transferred from this plan to another plan(s), identify the plan(s) to which assets or liabilities were transferred. (See instructions.)

5b(1) Name of plan(s)	5b(2) EIN(s)	5b(3) PN(s)

5c If the plan is a defined benefit plan, is it covered under the PBGC insurance program (See ERISA section 4021.)? ☒ Yes ☐ No ☐ Not determined
 If "Yes" is checked, enter the My PAA confirmation number from the PBGC premium filing for this plan year 4074026. (See instructions.)

<div>SCHEDULE R (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation</div>	<div>Retirement Plan Information</div> <div>This schedule is required to be filed under sections 104 and 4065 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6058(a) of the Internal Revenue Code (the Code).</div> <div>▶ File as an attachment to Form 5500.</div>	<div>OMB No. 1210-0110</div> <div>2017</div> <div>This Form is Open to Public Inspection.</div>
For calendar plan year 2017 or fiscal plan year beginning 01/01/2017 and ending 12/31/2017		
A Name of plan PENTAIR PUMP GROUP, INC. BARGAINING UNIT EMPLOYEES PENSION PLAN		B Three-digit plan number (PN) ▶ 002
C Plan sponsor's name as shown on line 2a of Form 5500 PENTAIR FLOW TECHNOLOGIES, LLC		D Employer Identification Number (EIN) 41-1881858
Part I	Distributions	
All references to distributions relate only to payments of benefits during the plan year.		
1 Total value of distributions paid in property other than in cash or the forms of property specified in the instructions		1
2 Enter the EIN(s) of payor(s) who paid benefits on behalf of the plan to participants or beneficiaries during the year (if more than two, enter EINs of the two payors who paid the greatest dollar amounts of benefits): EIN(s): Profit-sharing plans, ESOPs, and stock bonus plans, skip line 3.		
3 Number of participants (living or deceased) whose benefits were distributed in a single sum, during the plan year		3 1
Part II	Funding Information (If the plan is not subject to the minimum funding requirements of section 412 of the Internal Revenue Code or ERISA section 302, skip this Part.)	
4 Is the plan administrator making an election under Code section 412(d)(2) or ERISA section 302(d)(2)? Yes No N/A If the plan is a defined benefit plan, go to line 8.		
5 If a waiver of the minimum funding standard for a prior year is being amortized in this plan year, see instructions and enter the date of the ruling letter granting the waiver. Date: Month Day Year If you completed line 5, complete lines 3, 9, and 10 of Schedule MB and do not complete the remainder of this schedule.		
6 a Enter the minimum required contribution for this plan year (include any prior year accumulated funding deficiency not waived)		6a
b Enter the amount contributed by the employer to the plan for this plan year		6b
c Subtract the amount in line 6b from the amount in line 6a. Enter the result (enter a minus sign to the left of a negative amount)		6c
If you completed line 6c, skip lines 8 and 9.		
7 Will the minimum funding amount reported on line 6c be met by the funding deadline? Yes No N/A		
8 If a change in actuarial cost method was made for this plan year pursuant to a revenue procedure or other authority providing automatic approval for the change or a class ruling letter, does the plan sponsor or plan administrator agree with the change? Yes No N/A		
Part III	Amendments	
9 If this is a defined benefit pension plan, were any amendments adopted during this plan year that increased or decreased the value of benefits? If yes, check the appropriate box. If no, check the "No" box. Increase Decrease Both No		
Part IV	ESOPs (see instructions). If this is not a plan described under section 409(a) or 4975(e)(7) of the Internal Revenue Code, skip this Part.	
10 Were unallocated employer securities or proceeds from the sale of unallocated securities used to repay any exempt loan? Yes No		
11 a Does the ESOP hold any preferred stock? Yes No		
b If the ESOP has an outstanding exempt loan with the employer as lender, is such loan part of a "back-to-back" loan? (See instructions for definition of "back-to-back" loan.) Yes No		
12 Does the ESOP hold any stock that is not readily tradable on an established securities market? Yes No		
For Paperwork Reduction Act Notice, see the Instructions for Form 5500.		
Schedule R (Form 5500) 2017 v. 170203		

Part V Additional Information for Multiemployer Defined Benefit Pension Plans

13 Enter the following information for each employer that contributed more than 5% of total contributions to the plan during the plan year (measured in dollars). See instructions. *Complete as many entries as needed to report all applicable employers.*

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

- 14** Enter the number of participants on whose behalf no contributions were made by an employer as an employer of the participant for:

a The current year	14a	
b The plan year immediately preceding the current plan year	14b	
c The second preceding plan year	14c	

- 15** Enter the ratio of the number of participants under the plan on whose behalf no employer had an obligation to make an employer contribution during the current plan year to:

a The corresponding number for the plan year immediately preceding the current plan year	15a	
b The corresponding number for the second preceding plan year	15b	

- 16** Information with respect to any employers who withdrew from the plan during the preceding plan year:

a Enter the number of employers who withdrew during the preceding plan year	16a	
b If line 16a is greater than 0, enter the aggregate amount of withdrawal liability assessed or estimated to be assessed against such withdrawn employers	16b	

- 17** If assets and liabilities from another plan have been transferred to or merged with this plan during the plan year, check box and see instructions regarding supplemental information to be included as an attachment. ☐

Part VI Additional Information for Single-Employer and Multiemployer Defined Benefit Pension Plans

- 18** If any liabilities to participants or their beneficiaries under the plan as of the end of the plan year consist (in whole or in part) of liabilities to such participants and beneficiaries under two or more pension plans as of immediately before such plan year, check box and see instructions regarding supplemental information to be included as an attachment ☐

- 19** If the total number of participants is 1,000 or more, complete lines (a) through (c)

- a** Enter the percentage of plan assets held as:
 Stock: _____% Investment-Grade Debt: _____% High-Yield Debt: _____% Real Estate: _____% Other: _____%
- b** Provide the average duration of the combined investment-grade and high-yield debt:
☐ 0-3 years ☐ 3-6 years ☐ 6-9 years ☐ 9-12 years ☐ 12-15 years ☐ 15-18 years ☐ 18-21 years ☐ 21 years or more
- c** What duration measure was used to calculate line 19(b)?
☐ Effective duration ☐ Macaulay duration ☐ Modified duration ☐ Other (specify): _____

Pentair Pump Group, Inc. Bargaining Unit Employees Pension Plan

Employer ID No: 41-1881858

Plan Number: 002

Financial Statements as of and for the
Years Ended December 31, 2017 and 2016,
and Independent Auditors' Report

PENTAIR PUMP GROUP, INC. BARGAINING UNIT EMPLOYEES PENSION PLAN
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NOTE: All schedules required by Section 2520.103-10 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974 have been omitted because they are not applicable.



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INDEPENDENT AUDITORS' REPORT

To the Investment Committee of
Pentair plc
Golden Valley, Minnesota

Report on the Financial Statements

We were engaged to audit the accompanying financial statements of the Pentair Pump Group, Inc. Bargaining Unit Employees Pension Plan (the "Plan"), which comprise the statements of net assets available for benefits as of December 31, 2017 and 2016, and the related statements of changes in net assets available for benefits for the years then ended, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on conducting the audit in accordance with auditing standards generally accepted in the United States of America. Because of the matter described in the Basis for Disclaimer of Opinion paragraph, however, we were not able to obtain sufficient appropriate audit evidence to provide a basis for an audit opinion.

Basis for Disclaimer of Opinion

As permitted by 29 CFR 2520.103-8 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974, the plan administrator instructed us not to perform, and we did not perform, any auditing procedures with respect to the information summarized in Note 3, which was certified by The Bank of New York Mellon, the trustee of the Plan, except for comparing such information with the related information included in the financial statements. We have been informed by the plan administrator that the trustee holds the Plan's investment assets and executes investment transactions. The plan administrator has obtained certifications from the trustee as of December 31, 2017 and 2016, and for the years then ended, that the information provided to the plan administrator by the trustee is complete and accurate.

Disclaimer of Opinion

Because of the significance of the matter described in the Basis for Disclaimer of Opinion paragraph, we have not been able to obtain sufficient appropriate audit evidence to provide a basis for an audit opinion. Accordingly, we do not express an opinion on these financial statements.

Report on Form and Content in Compliance with Department of Labor Rules and Regulations

The form and content of the information included in the financial statements, other than that derived from the information certified by the trustee, have been audited by us in accordance with auditing standards generally

accepted in the United States of America and, in our opinion, are presented in compliance with the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974.

Deloitte + Touche LLP

September 14, 2018

PENTAIR PUMP GROUP, INC. BARGAINING UNIT EMPLOYEES PENSION PLAN
STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS
AS OF DECEMBER 31, 2017 AND 2016

	<u>2017</u>	<u>2016</u>
ASSETS:		
Plan interest in Pentair, Inc. Master Trust	\$ 19,099,590	\$ 17,549,803
NET ASSETS AVAILABLE FOR BENEFITS	<u>\$ 19,099,590</u>	<u>\$ 17,549,803</u>

See notes to financial statements.

PENTAIR PUMP GROUP, INC. BARGAINING UNIT EMPLOYEES PENSION PLAN
STATEMENTS OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS
FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016

	<u>2017</u>	<u>2016</u>
Investment income — net investment income from Pentair, Inc. Master Trust	\$ 2,166,104	\$ 1,270,070
DEDUCTIONS:		
Benefits paid directly to participants	578,436	312,172
Administrative expenses	37,881	35,905
Total deductions	<u>616,317</u>	<u>348,077</u>
NET ADDITIONS	<u>1,549,787</u>	<u>921,993</u>
NET ASSETS AVAILABLE FOR BENEFITS - Beginning of year	17,549,803	16,627,810
NET ASSETS AVAILABLE FOR BENEFITS - End of year	<u><u>\$ 19,099,590</u></u>	<u><u>\$ 17,549,803</u></u>

See notes to financial statements.

1. DESCRIPTION OF THE PLAN

The following description of the Pentair Pump Group, Inc. Bargaining Unit Employees Pension Plan (the “Plan”) is provided for general information purposes only. Participants should refer to the Plan document for more complete information.

General — The Plan is a defined benefit pension plan established for the employees regularly employed in an hourly rated position included within the bargaining units of Pentair Pump Group, Inc. (the “Company”). The Company is a subsidiary of Pentair plc and is the Plan sponsor as well as Plan administrator. The Plan is subject to the applicable provisions of the Employee Retirement Income Security Act of 1974 (“ERISA”), as amended. On August 23, 1997, the Company acquired pump manufacturing assets from three businesses of General Signal Corporation. Subsequently, the Company entered into collective bargaining agreements to provide pension benefits to active employees of these three businesses under a defined benefit plan sponsored by the Company. Effective August 23, 1997, the Company replaced McNeil (Ohio) Corporation as the sponsor of the F.E. Myers Company Bargaining Unit Employees’ Pension Plan, and the Plan was renamed the Pentair Pump Group, Inc. Bargaining Unit Employees Pension Plan. F.E. Myers Company became a participating employer under the Plan.

The normal retirement benefit, expressed in the form of a straight-life annuity, is equal to the product of the applicable monthly benefit rate times the individual’s years of credited service (subject to caps for some bargaining units). The monthly benefit rate varies with an employee’s union affiliation and date of retirement.

The officers of Pentair, Inc. (parent of the controlled group, which includes the Company) appoint the members of the Investment Committee of the Pentair, Inc. Master Trust (the “Master Trust”). This committee has delegated certain investment authority to investment managers under contractual arrangements, consisting primarily of latitude in the selection of underlying investments within approved asset categories.

Funding Policy — Contributions to provide benefits under the Plan are made solely by the Company. The Company’s general funding policy is to contribute the minimum required by ERISA. The Company occasionally makes contributions greater than the minimum, but not exceeding the maximum deductible for federal income tax purposes, when the Company’s cash flow permits. The Plan has met the minimum funding requirements of ERISA for 2017 and 2016.

Participation and Vesting — An employee may become a participant in the Plan after one year of service (elapsed time method) and attainment of age 21.

Vesting service is computed in years (to the nearest 1/12 of a year) of an employee’s continuous employment. A participant is vested in his or her accrued benefit only upon completion of five years of vesting service.

Pension benefits are payable to all participants who attain normal retirement age (65) and have completed approximately five years of employment. An early retirement benefit is payable to participants who have completed 15 or more years of vesting service and attained age 55. In the case of totally and permanently disabled participants, benefits are payable to active participants who have become disabled after age 40 and prior to attaining age 65, as long as they have completed at least 15 years of vesting service. Those participants taking early retirement before age 65 receive a benefit equal to the normal retirement benefit, based on service at termination, reduced by 0.6% for each month preceding normal retirement. The disability benefit amount is limited to the amount accrued at the time of disability and offset by other disability benefits.

In addition, a preretirement death benefit is provided to the surviving spouse of any vested participant (married for at least one year as of the date of death) who dies prior to retirement.

Priorities Upon Termination of the Plan — Although it has not expressed any intention to do so, the Company has the right under the Plan, in certain circumstances, to discontinue its contributions at any time and to terminate the Plan subject to the provisions set forth in ERISA. In the event that the Plan is terminated, the Plan provides for the allocation of available assets to pay benefits in the following order (with proration within groups):

- a. Certain benefits payable three years prior to termination;
- b. Benefits that are guaranteed by the Pension Benefit Guaranty Corporation (“PBGC”), subject to certain limitations prescribed by ERISA;

Pentair Pump Group, Inc. Bargaining Unit Employees Pension Plan
Notes to Financial Statements
As of and for the years ended December 31, 2017 and 2016

- c. All other uninsured, vested benefits;
- d. All other benefits accrued to date of termination; and
- e. The remainder, if any, reverts to the employer.

Certain benefits under the Plan are insured by the PBGC if the Plan terminates. Generally, the PBGC guarantees most vested normal age retirement benefits, early retirement benefits, and certain disability and survivor's pensions. However, the PBGC does not guarantee all types of benefits under the Plan, and the amount of benefit protection is subject to certain limitations. Vested benefits under the Plan are guaranteed at the level in effect on the date of the Plan's termination, subject to a statutory ceiling on the amount of an individual's monthly benefit.

Whether all participants receive their benefits should the Plan be terminated at some future time will depend on the sufficiency, at that time, of the Plan's net assets to provide those benefits, the priority of those benefits to be paid, and the level and type of benefits guaranteed by the PBGC at that time. Some benefits may be fully or partially provided for by the then-existing assets and the PBGC guaranty while other benefits may not be provided for at all.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The accompanying financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP").

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities and changes therein; disclosure of contingent assets and liabilities; and the actuarial present value of accumulated plan benefits and changes therein at the date of the financial statements. Actual results could differ from those estimates.

The Plan funds are invested in the Master Trust held by The Bank of New York Mellon (the "Trustee").

Investments in the Master Trust are presented at estimated fair value. If available, quoted market prices are used to value investments. Quoted prices are based on the last reported sale price on the last business day of the year. In instances wherein quoted market prices are not available, securities and other alternative investments are stated at estimated fair value as determined by the custodian of those investments. Investments in partnerships and joint ventures are determined by investment group managers based on the estimated value of the various holdings in the partnership and joint venture portfolio. Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date. Net appreciation and depreciation in the fair value of investments, which is included within *Net investment income from Pentair, Inc. Master Trust* on the Statements of Changes in Net Assets Available for Benefits, includes gains and losses in investments sold during the year as well as appreciation and depreciation of the investments held at year end.

The Plan utilizes various investment securities, including U.S. treasuries, corporate debt instruments, mutual funds, mortgage-backed securities, corporate stocks and other investments. Investment securities, in general, are exposed to various risks, such as interest rates, credit risk, and overall market volatility. Due to the level of risk associated with certain investment securities, it is reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect the amounts reported in the financial statements.

Plan contributions are made and the actuarial present value of accumulated plan benefits are reported based on certain assumptions pertaining to interest rates, inflation rates and employee demographics, all of which are subject to change. Due to uncertainties inherent in the estimations and assumptions process, it is reasonably possible that changes in these estimates and assumptions in the near term would be material to the financial statements.

Administrative expenses, such as actuarial and auditing fees, and charges and expenses incurred in connection with the acquisition or disposition of the Plan's assets, such as custodial fees, investment management fees and brokerage commissions, are paid by the Plan or from the Master Trust's assets.

Benefit payments to participants are recorded upon distribution.

The financial statements also reflect accounting guidance related to fair value measurements which establishes a single authoritative definition of fair value, sets a framework for measuring fair value and requires additional disclosures about fair value measurements.

Pentair Pump Group, Inc. Bargaining Unit Employees Pension Plan
Notes to Financial Statements
As of and for the years ended December 31, 2017 and 2016

In February 2017, the Financial Accounting Standards Board (“FASB”) issued a new accounting standard which requires an employee benefit plan to report an interest in a master trust and the change in the value of that interest as separate line items on the statement of net assets and the statement of changes in net assets, respectively. In addition, the standard requires plans to disclose their percentage interest in the Master Trust and a list of the investments held by the Master Trust, presented by general type within the plan’s financial statements. The standard is effective for fiscal years beginning after December 15, 2018, with early adoption permitted. The Company adopted the standard in 2016.

In May 2015, the FASB issued a new accounting standard related to fair value measurement. This guidance removes the requirements to categorize, within the fair value hierarchy, all investments for which fair value is measured using the net asset value (“NAV”) per share practical expedient. The guidance also removes the requirement to make certain disclosures for all investments that are eligible to be measured at fair value using NAV per share practical expedient. The standard became effective for interim and annual reporting periods beginning after December 15, 2016, with early adoption permitted. The Company adopted the standard in 2016.

For the year ended December 31, 2017, subsequent events were evaluated through September 14, 2018, the date the financial statements were available to be issued.

3. INFORMATION CERTIFIED BY THE TRUSTEE

The following is a summary of the unaudited information regarding the Plan as of December 31, 2017 and 2016, and for the years then ended, included in the Plan’s financial statements, that was prepared by or derived from information prepared by the Trustee of the Plan, and furnished to the Plan administrator. The Plan administrator has obtained certifications from the Trustee that the following investment information is complete and accurate.

	2017	2016
Statements of net assets available for benefits:		
Plan interest in Pentair, Inc. Master Trust	\$ 19,099,590	\$ 17,549,803
	2017	2016
Statements of changes in net assets available for benefits:		
Net investment income from Pentair, Inc. Master Trust	\$ 2,166,104	\$ 1,270,070

All investment balances included in Notes 4 and 6, are certified by the Trustee, with the exception of the fair value leveling of the Master Trust’s investments.

4. MASTER TRUST

The Company has established the Master Trust with the Trustee for two pension plans. The purpose of this combination is to pool investment transactions and achieve uniform rates of return on comparable funds under all plans. The plans have deposited funds in the Master Trust, and each owns an undivided interest in net assets of the Master Trust based on its equity in the Master Trust.

Under the terms of the trust agreements, the Trustee manages trust funds on behalf of the Plan. In accordance with the trust agreements, certain assets of the Plan are held together with assets of other plans in the Master Trust sponsored by the Company and its subsidiaries.

Pentair Pump Group, Inc. Bargaining Unit Employees Pension Plan
Notes to Financial Statements
As of and for the years ended December 31, 2017 and 2016

The allocation of trust funds and *investment income* among the participating pension plans in the Master Trust is determined on a unit value basis, as determined by the Trustee. The allocation of funds at December 31, 2017 and 2016, were as follows:

	2017		2016	
	Amount	Percentage Ownership	Amount	Percentage Ownership
Pentair, Inc. Pension Plan ⁽¹⁾	\$ 355,050,294	94.9%	\$ 326,620,161	94.9%
Pentair Pump Group, Inc. Bargaining Unit Employee Pension Plan	19,099,590	5.1%	17,549,803	5.1%
Net assets of the Pentair, Inc. Master Trust	<u>\$ 374,149,884</u>	<u>100.0%</u>	<u>\$ 344,169,964</u>	<u>100.0%</u>

⁽¹⁾ In November 2017, the Company's Board of Directors authorized the termination of the plan, effective December 31, 2017.

The net assets and investments of the Master Trust at December 31, 2017 and 2016, were as follows:

	2017		2016	
	Master Trust Balances	Plan's Interest in Master Trust Balances	Master Trust Balances	Plan's Interest in Master Trust Balances
Assets:				
Investments at fair value:				
Cash equivalents	\$ 1,151,378	\$ 58,776	\$ 895,139	\$ 45,645
Fixed income:				
Corporate and non-U.S. government	262,840,235	13,417,459	269,679,003	13,751,384
U.S. treasuries	43,174,638	2,203,977	30,478,894	1,554,170
Mortgage-backed securities	3,335,880	170,290	4,545,358	231,775
Other fixed income securities	59,239,762	3,024,069	33,147,638	1,690,254
Other investments	1,081,074	55,187	2,012,984	102,645
Total investments at fair value	<u>370,822,967</u>	<u>18,929,758</u>	<u>340,759,016</u>	<u>17,375,873</u>
Receivables — interest and dividends	3,326,917	169,832	3,410,948	173,930
Total assets	<u>374,149,884</u>	<u>19,099,590</u>	<u>344,169,964</u>	<u>17,549,803</u>
Net assets of the Pentair, Inc. Master Trust	<u>\$ 374,149,884</u>	<u>\$ 19,099,590</u>	<u>\$ 344,169,964</u>	<u>\$ 17,549,803</u>

Investment income of the Master Trust for the years ended December 31, 2017 and 2016, was as follows:

	2017	2016
Interest income	\$ 12,491,104	\$ 12,278,049
Net appreciation in fair value of investments	28,401,455	11,440,987
Net gain from common/collective trust	2,998,093	2,432,668
Investment income from Pentair, Inc. Master Trust	<u>\$ 43,890,652</u>	<u>\$ 26,151,704</u>

5. ACCUMULATED PLAN BENEFITS

Accumulated plan benefits are those future periodic payments that are attributable under the Plan's provisions to the employees' contributions, compensation, and services employees have rendered as of the valuation date. Accumulated plan benefits include benefits expected to be paid to (a) retired or terminated employees or their beneficiaries and, (b) present employees or their beneficiaries. Benefits payable as a result of retirement, death, disability or termination of employment are included, to the extent they are deemed attributable to employee service rendered through the valuation date.

The actuarial present value of accumulated plan benefits is determined by an independent actuary. The amount results from applying actuarial assumptions to adjust the accumulated plan benefits to reflect the time value of money (through discounts for interest) and the probability of payment (by means of decrements, such as for death, disability, withdrawal, or retirement) between the valuation date and the expected date of payment.

The significant assumptions underlying the actuarial computations as of January 1, 2017 and 2016, were as follows:

Investment return	4.11% for 2017 and 4.28% for 2016, compounded annually for funding purposes, and the present value of accumulated plan benefits for 2017 and 2016
Discount rate	4.11% for 2017 and 4.28% for 2016
Mortality	MRP 2007 Mortality Table with improvement scale MMP-2007 for 2017 and 2016
Retirement age	Earlier of 62 with 10 years of service or age 65 for active; age 62 for vested and disabled employees for 2017 and 2016
Actuarial method	Unit credit for 2017 and 2016

The foregoing actuarial assumptions are based on the presumption that the Plan will continue. If the Plan were to terminate, different actuarial assumptions and other factors might be applicable in determining the actuarial present value of accumulated plan benefits.

The actuarial present value of accumulated plan benefits as of January 1, 2017 and 2016, were as follows:

	2017	2016
Vested benefits:		
Participants and/or beneficiaries currently receiving benefits	\$ 4,086,927	\$ 3,576,497
Other participants	13,904,941	13,163,150
Total vested benefits	17,991,868	16,739,647
Nonvested benefits	403,601	370,656
Total actuarial present value of accumulated plan benefits	<u>\$ 18,395,469</u>	<u>\$ 17,110,303</u>

Pentair Pump Group, Inc. Bargaining Unit Employees Pension Plan
Notes to Financial Statements
As of and for the years ended December 31, 2017 and 2016

The changes in the actuarial present value of the Plan's accumulated plan benefits for the years ended January 1, 2017 and 2016, were as follows:

Actuarial present value of accumulated plan benefits — January 1, 2015	\$ 17,821,893
Change attributable to:	
Benefits accumulated	838,623
Benefits paid	(269,671)
Increase for interest due to the decrease in discount period	645,168
Change in actuarial assumptions	(1,925,710)
Net decrease	(711,590)
Actuarial present value of accumulated plan benefits — January 1, 2016	17,110,303
Change attributable to:	
Benefits accumulated	501,830
Benefits paid	(312,172)
Increase for interest due to the decrease in discount period	725,084
Change in actuarial assumptions	370,424
Net increase	1,285,166
Actuarial present value of accumulated plan benefits — January 1, 2017	\$ 18,395,469

6. FAIR VALUE MEASUREMENTS

The Plan's estimates of fair value for financial assets are based on the framework established in the fair value accounting guidance. Fair value is the price that would be received by the Plan for an asset or paid by the Plan to transfer a liability (an exit price) in an orderly transaction between market participants on the measurement date in the Plan's principal or most advantageous market for the asset or liability. Fair value measurements are determined by maximizing the use of observable inputs and minimizing the use of unobservable inputs. The hierarchy places the highest priority on unadjusted quoted market prices in active markets for identical assets or liabilities (level 1 measurements) and gives the lowest priority to unobservable inputs (level 3 measurements). The three levels of inputs within the fair value hierarchy are defined as follows:

Level 1: Quoted prices (unadjusted) for identical assets or liabilities in active markets that the Plan has the ability to access.

Level 2: Significant other observable inputs other than Level 1 prices such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable market data.

Level 3: Significant unobservable inputs that reflect the Plan's own assumptions about the assumptions that market participants would use in pricing an asset or liability.

In some cases, a valuation technique used to measure fair value may include inputs from multiple levels of the fair value hierarchy. The lowest level of significant input determines the placement of the entire fair value measurement in the hierarchy.

Certain investments are measured at fair value on a recurring basis in the statements of net assets available for benefits. The following methods and assumptions were used to estimate the fair values:

Cash Equivalents — Consist of investment in commingled funds valued based on observable market data.

Fixed Income — Investments in corporate bonds, government securities, mortgages and asset backed securities are valued based upon quoted market prices for identical or similar securities and other observable market data. Investments in commingled funds are valued at the NAV of units held at the end of the period based upon the value of the underlying investments as determined by quoted market prices or by a pricing service.

Other Investments — Other investments include investments in commingled funds with diversified investment strategies. Investments in commingled funds that are valued at the NAV of units held at the end of the period based upon

Pentair Pump Group, Inc. Bargaining Unit Employees Pension Plan
Notes to Financial Statements
As of and for the years ended December 31, 2017 and 2016

the value of the underlying investments as determined by quoted market prices or by a pricing service. Investments in commingled funds that are valued based on unobservable inputs due to liquidation restrictions are classified as Level 3.

The following table sets forth by level within the fair value hierarchy a summary of the investments of the Master Trust at fair value as of December 31, 2017:

	Level 1	Level 2	Level 3	Total
Fixed income:				
Corporate and non-U.S. government	—	262,840,235	—	262,840,235
U.S. treasuries	—	43,174,638	—	43,174,638
Mortgage-backed securities	—	3,335,880	—	3,335,880
Other	—	33,307,951	—	33,307,951
Other investments	—	—	1,081,074	1,081,074
Net assets in fair value hierarchy	—	342,658,704	1,081,074	343,739,778
Investments at NAV practical expedient ⁽¹⁾				27,083,189
Total Pentair, Inc. Master Trust	\$ —	\$ 342,658,704	\$ 1,081,074	\$ 370,822,967

⁽¹⁾ In Accordance with Accounting Standards Codification (“ASC”) 820-10, certain investments that are measured at fair value using the NAV (or its equivalent) practical expedient have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the fair value of the Plan’s assets at the end of each respective year.

The following table presents a reconciliation of the beginning and ending balances of the fair value measurements using significant unobservable inputs (Level 3):

	Balance January 1, 2017	Net Investment Income ⁽¹⁾	Purchases	Sales	Balance December 31, 2017
Other investments	\$ 2,012,984	\$ (51,289)	\$ —	\$ (880,621)	\$ 1,081,074

⁽¹⁾ Includes \$39,625 of unrealized losses on assets held at December 31, 2017.

The following sets forth a summary of the Master Trust’s common/collective trust investments, at December 31, 2017, in which fair value is estimated based on the NAV and their redemption features:

	Fair value	Unfunded Commitments	Redemption Frequency	Redemption Notice Period	Other Redemption Restrictions
CB Long Duration Credit Fund	\$ 25,931,811	\$ —	Daily	None	None
EB Temp Investment Fund	1,151,378	—	Daily	None	None
	<u>\$ 27,083,189</u>	<u>\$ —</u>			

Pentair Pump Group, Inc. Bargaining Unit Employees Pension Plan
Notes to Financial Statements
As of and for the years ended December 31, 2017 and 2016

The following table sets forth by level within the fair value hierarchy a summary of the investments of the Master Trust at fair value as of December 31, 2016:

	Level 1	Level 2	Level 3	Total
Cash equivalents	\$ —	\$ 628	\$ —	\$ 628
Fixed income:				
Corporate and non-U.S. government	—	269,679,003	—	269,679,003
U.S. treasuries	—	30,478,894	—	30,478,894
Mortgage-backed securities	—	4,545,358	—	4,545,358
Other	—	8,182,894	—	8,182,894
Other investments	—	—	2,012,984	2,012,984
Net assets in fair value hierarchy	—	312,886,777	2,012,984	314,899,761
Investments at NAV practical expedient ⁽¹⁾				25,859,255
Total Pentair, Inc. Master Trust	\$ —	\$ 312,886,777	\$ 2,012,984	\$ 340,759,016

⁽¹⁾ In Accordance with ASC 820-10, certain investments that are measured at fair value using the NAV (or its equivalent) practical expedient have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the fair value of the Plan's assets at the end of each respective year.

The following table presents a reconciliation of the beginning and ending balances of the fair value measurements using significant unobservable inputs (Level 3):

	Balance January 1, 2016	Net Investment Income ⁽¹⁾	Purchases	Sales	Balance December 31, 2016
Other investments	\$ 4,112,447	\$ (404,754)	\$ —	\$ (1,694,709)	\$ 2,012,984

⁽¹⁾ Includes \$348,713 of unrealized losses on assets held at December 31, 2016.

The following sets forth a summary of the Master Trust's common/collective trust investments, at December 31, 2016, in which fair value is estimated based on the NAV per share and their redemption features:

	Fair value	Unfunded Commitments	Redemption Frequency	Redemption Notice Period	Other Redemption Restrictions
CB Long Duration Credit Fund	\$ 23,715,514	\$ —	Daily	None	None
EB Temp Investment Fund	2,143,741	—	Daily	None	None
	<u>\$ 25,859,255</u>	<u>\$ —</u>			

Transfers Between Levels — The availability of observable market data is monitored to assess the appropriate classification of financial instruments within the fair value hierarchy. Changes in economic conditions or model-based valuation techniques may require the transfer of financial instruments from one fair value level to another. In such instances, the transfer is reported at the beginning of the reporting period.

We evaluate transfers between levels for each investment held in the Plan. For the years ended December 31, 2017 and 2016, there were no transfers between levels.

7. FEDERAL INCOME TAX STATUS

The Internal Revenue Service ("IRS") has determined and informed the Company by a letter dated June 15, 2015, that the Plan was designed in accordance with applicable regulations of the Internal Revenue Code. Therefore, no provision for income taxes has been included in the Plan's financial statements.

Pentair Pump Group, Inc. Bargaining Unit Employees Pension Plan
Notes to Financial Statements
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GAAP requires Plan management to evaluate tax positions taken by the Plan and recognize a tax liability (or asset) if the Plan has taken an uncertain tax position that more than likely would not be sustained upon examination by the IRS. The Plan is subject to routine audits by taxing jurisdictions; however, there are currently no audits for any tax periods in progress. The Plan administrator believes it is no longer subject to income tax examinations for years prior to 2014.

8. EXEMPT PARTY-IN-INTEREST TRANSACTIONS

The Bank of New York Mellon is the Trustee, and therefore, certain transactions qualify as party-in-interest transactions. Fees paid by the Master Trust to The Bank of New York Mellon for investment management services were \$61,108 and \$38,195 for the years ended December 31, 2017 and 2016, respectively.

SCHEDULE SB (Form 5500) <small>Department of the Treasury Internal Revenue Service</small> <small>Department of Labor Employee Benefits Security Administration</small> <small>Pension Benefit Guaranty Corporation</small>	Single-Employer Defined Benefit Plan Actuarial Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6059 of the Internal Revenue Code (the Code). ► File as an attachment to Form 5500 or 5500-SF.	OMB No. 1210-0110 2017 This Form is Open to Public Inspection
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For calendar plan year 2017 or fiscal plan year beginning <u>01/01/2017</u> and ending <u>12/31/2017</u>			
► Round off amounts to nearest dollar.			
► Caution: A penalty of \$1,000 will be assessed for late filing of this report unless reasonable cause is established.			
A Name of plan PENTAIR PUMP GROUP, INC. BARGAINING UNIT EMPLOYEES PENSION PLAN	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:60%;">B Three-digit plan number (PN) ►</td> <td style="width:40%; text-align: center;">002</td> </tr> </table>	B Three-digit plan number (PN) ►	002
B Three-digit plan number (PN) ►	002		
C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF PENTAIR FLOW TECHNOLOGIES, LLC	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>D Employer Identification Number (EIN) 41-1881858</td> </tr> </table>	D Employer Identification Number (EIN) 41-1881858	
D Employer Identification Number (EIN) 41-1881858			
E Type of plan: ☒ Single ☐ Multiple-A ☐ Multiple-B F Prior year plan size: ☐ 100 or fewer ☐ 101-500 ☒ More than 500			

Part I Basic Information			
1 Enter the valuation date: Month <u>01</u> Day <u>01</u> Year <u>2017</u>			
2 Assets:			
a Market value.....	2a	17,549,803	
b Actuarial value.....	2b	17,454,937	
3 Funding target/participant count breakdown	(1) Number of participants	(2) Vested Funding Target	(3) Total Funding Target
a For retired participants and beneficiaries receiving payment	78	3,527,339	3,527,339
b For terminated vested participants	146	2,223,724	2,223,724
c For active participants	325	7,748,332	7,828,430
d Total.....	549	13,499,395	13,579,493
4 If the plan is in at-risk status, check the box and complete lines (a) and (b) ☐			
a Funding target disregarding prescribed at-risk assumptions.....	4a		
b Funding target reflecting at-risk assumptions, but disregarding transition rule for plans that have been in at-risk status for fewer than five consecutive years and disregarding loading factor.....	4b		
5 Effective interest rate.....	5	6.03%	
6 Target normal cost	6	568,860	

Statement by Enrolled Actuary
 To the best of my knowledge, the information supplied in this schedule and accompanying schedules, statements and attachments, if any, is complete and accurate. Each prescribed assumption was applied in accordance with applicable law and regulations. In my opinion, each other assumption is reasonable (taking into account the experience of the plan and reasonable expectations) and such other assumptions, in combination, offer my best estimate of anticipated experience under the plan.

SIGN HERE	 Signature of actuary GREGORY T. TRAPP, ASA, EA, MAAA Type or print name of actuary MERCER Firm name 333 SOUTH 7TH STREET, SUITE 1400 MINNEAPOLIS MN 55402-2427 Address of the firm	<u>9/25/2018</u> Date 1705207 Most recent enrollment number 612-642-8600 Telephone number (including area code)
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Part II Beginning of Year Carryover and Prefunding Balances

	(a) Carryover balance	(b) Prefunding balance
7 Balance at beginning of prior year after applicable adjustments (line 13 from prior year).....	0	5,362,384
8 Portion elected for use to offset prior year's funding requirement (line 35 from prior year)	0	814,822
9 Amount remaining (line 7 minus line 8).....	0	4,547,562
10 Interest on line 9 using prior year's actual return of <u>8.44%</u>	0	383,814
11 Prior year's excess contributions to be added to prefunding balance:		
a Present value of excess contributions (line 38a from prior year)		0
b(1) Interest on the excess, if any, of line 38a over line 38b from prior year Schedule SB, using prior year's effective interest rate of <u>6.23%</u>		0
b(2) Interest on line 38b from prior year Schedule SB, using prior year's actual return		0
c Total available at beginning of current plan year to add to prefunding balance.....		0
d Portion of (c) to be added to prefunding balance.....		0
12 Other reductions in balances due to elections or deemed elections		
13 Balance at beginning of current year (line 9 + line 10 + line 11d – line 12)	0	4,931,376

Part III Funding Percentages

14 Funding target attainment percentage	14	92.22%
15 Adjusted funding target attainment percentage.....	15	128.53%
16 Prior year's funding percentage for purposes of determining whether carryover/prefunding balances may be used to reduce current year's funding requirement	16	88.94%
17 If the current value of the assets of the plan is less than 70 percent of the funding target, enter such percentage.	17	%

Part IV Contributions and Liquidity Shortfalls

18 Contributions made to the plan for the plan year by employer(s) and employees:					
(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees	(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees
09/10/2018	710,000	0			
Totals ▶			18(b)	710,000	18(c) 0

19 Discounted employer contributions – see instructions for small plan with a valuation date after the beginning of the year:			
a Contributions allocated toward unpaid minimum required contributions from prior years.....	19a		0
b Contributions made to avoid restrictions adjusted to valuation date	19b		0
c Contributions allocated toward minimum required contribution for current year adjusted to valuation date.....	19c		643,092
20 Quarterly contributions and liquidity shortfalls:			
a Did the plan have a “funding shortfall” for the prior year?.....			☒ Yes ☐ No
b If line 20a is “Yes,” were required quarterly installments for the current year made in a timely manner?			☐ Yes ☒ No
c If line 20a is “Yes,” see instructions and complete the following table as applicable:			
Liquidity shortfall as of end of quarter of this plan year			
(1) 1st	(2) 2nd	(3) 3rd	(4) 4th
0	0	0	0

Part V Assumptions Used to Determine Funding Target and Target Normal Cost

21 Discount rate:				
a Segment rates:	1st segment: 4.16 %	2nd segment: 5.72 %	3rd segment: 6.48 %	☐ N/A, full yield curve used
b Applicable month (enter code)				21b 4
22 Weighted average retirement age				22 65
23 Mortality table(s) (see instructions) ☐ Prescribed - combined ☒ Prescribed - separate ☐ Substitute				

Part VI Miscellaneous Items

24 Has a change been made in the non-prescribed actuarial assumptions for the current plan year? If "Yes," see instructions regarding required attachment.	☒ Yes ☐ No
25 Has a method change been made for the current plan year? If "Yes," see instructions regarding required attachment.	☐ Yes ☒ No
26 Is the plan required to provide a Schedule of Active Participants? If "Yes," see instructions regarding required attachment.	☒ Yes ☐ No
27 If the plan is subject to alternative funding rules, enter applicable code and see instructions regarding attachment	27

Part VII Reconciliation of Unpaid Minimum Required Contributions For Prior Years

28 Unpaid minimum required contributions for all prior years	28	0
29 Discounted employer contributions allocated toward unpaid minimum required contributions from prior years (line 19a)	29	0
30 Remaining amount of unpaid minimum required contributions (line 28 minus line 29)	30	0

Part VIII Minimum Required Contribution For Current Year

31 Target normal cost and excess assets (see instructions):			
a Target normal cost (line 6)	31a	568,860	
b Excess assets, if applicable, but not greater than line 31a	31b	0	
32 Amortization installments:			
a Net shortfall amortization installment	Outstanding Balance	Installment	
b Waiver amortization installment	1,055,932	226,236	
	0	0	
33 If a waiver has been approved for this plan year, enter the date of the ruling letter granting the approval (Month _____ Day _____ Year _____) and the waived amount	33		
34 Total funding requirement before reflecting carryover/prefunding balances (lines 31a - 31b + 32a + 32b - 33)....	34	795,096	
	Carryover balance	Prefunding balance	Total balance
35 Balances elected for use to offset funding requirement	0	795,096	795,096
36 Additional cash requirement (line 34 minus line 35)	36	0	
37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c)	37	643,092	
38 Present value of excess contributions for current year (see instructions)			
a Total (excess, if any, of line 37 over line 36)	38a	643,092	
b Portion included in line 38a attributable to use of prefunding and funding standard carryover balances	38b	643,092	
39 Unpaid minimum required contribution for current year (excess, if any, of line 36 over line 37)	39	0	
40 Unpaid minimum required contributions for all years	40	0	

Part IX Pension Funding Relief Under Pension Relief Act of 2010 (See Instructions)

41 If an election was made to use PRA 2010 funding relief for this plan:			
a Schedule elected	☐ 2 plus 7 years ☐ 15 years		
b Eligible plan year(s) for which the election in line 41a was made	☐ 2008 ☐ 2009 ☐ 2010 ☐ 2011		
42 Amount of acceleration adjustment	42		
43 Excess installment acceleration amount to be carried over to future plan years	43		

Schedule SB, Line 8 – Late Election to Apply Balances to Quarterly Installments

The balances used to offset funding requirement reported on line 35 of the 2016 Schedule SB was \$814,349 of prefunding balance. The portion used to offset prior year's funding requirement reported on line 8a of the 2017 Schedule SB is \$814,822. The discrepancy is a result of the sponsor making a late election to apply carryover balance to quarterly funding requirements. The amount shown on line 8a of the 2017 Schedule SB reflects an interest penalty of \$473 for the late election.

Schedule SB, Part V — Statement of Actuarial Assumption/Methods

ACTUARIAL ASSUMPTIONS FOR JANUARY 1, 2017 FUNDING VALUATION

DISCOUNT RATE SPONSOR ELECTIONS			
------------------------------------	--	--	--

- Segment rates or full yield curve Segment
- Look-back months 4
- Use stabilized rates – funding Yes
- Use stabilized rates – Section 436 benefit restrictions Yes

	<u>Stabilized rates</u> (BBA'17)	<u>Nonstabilized rates</u>
• First 5 years	4.16%	1.52%
• Next 15 years	5.72%	3.80%
• Over 20 years	6.48%	4.79%

Rationale: Prescribed assumption by the IRS and the PBGC

*Schedule SB, Part V — Statement of Actuarial Assumption/Methods***MORTALITY SPONSOR
ELECTIONS**

Section 430(h)(3) prescribed separate static annuitant and nonannuitant mortality tables. These tables are based on the RP-2000 mortality tables projected with mortality improvement to the valuation year plus 7 and 15 years based on Scale AA.

Rationale: Prescribed assumption by the IRS

OTHER ECONOMIC ASSUMPTIONS

- Expected investment return 3.65% for year 2015, 4.28% for year 2016 and 4.11% for year 2017.
Rationale: Based on the expected yield of a dedicated high quality bond portfolio constructed to match the qualified pension plan's projected benefit payments.
- Expenses \$151,000 added to current year normal cost.
Rationale: Prior year's actual administrative expense adjusted for expected changes in PBGC premiums.

DEMOGRAPHIC ASSUMPTIONS

- Withdrawal Sum of (a) and (b)
 - a) Three times the rates in the Massachusetts Mutual A. Table for Males.
 - b) Two times Hunter's Rates for males and four times Hunter's Rates for females.

See table of sample rates.
- Disability incidence **None.**
- Retirement age Age 65. (Individuals employed at the Kansas City location who had attained age 50 and earned five years of credited service as of October 1, 1996 are assumed to retire at age 62.)
- Benefit commencement age for
 - Future vested deferred 65
 - Current vested deferred 65
- Spouse assumptions **MALE PARTICIPANTS** **FEMALE PARTICIPANTS**

Schedule SB, Part V — Statement of Actuarial Assumption/Methods

– Percentage married	75%	75%	
– Spouse age difference	2 years younger	2 years older	
FORM OF PAYMENT	<u>SINGLE LIFE</u>	<u>50% J&S</u>	<u>100% J&S</u>
• Active retirements	50%	25%	25%
• Future vested deferred	50%	25%	25%
• Future deaths	100%	0%	0%
• Current vested deferred	50%	25%	25%
UNPREDICTABLE CONTINGENT EVENT ASSUMPTIONS	N/A		

Table of Sample Rates

ATTAINED AGE	WITHDRAWAL	
	MALE	FEMALE
20	22.3%	22.4%
25	16.3%	16.4%
30	10.3%	10.4%
35	7.2%	7.3%
40	4.1%	4.2%
45	2.2%	2.4%
50	0.3%	0.7%
55	0.6%	1.1%

Schedule SB, Part V — Statement of Actuarial Assumption/Methods

60	1.1%	2.2%
----	------	------

Rationale for demographic and form of payment assumptions: The plan sponsor believes these assumptions to be reasonable and representative of current and future expected experience. The plan's signing actuary monitors experience annually and has not detected any significant gains or losses.

ACTUARIAL METHODS FOR FUNDING**Asset Methods – effective January 1, 2009**

The asset valuation method is an average of the adjusted market value for each year during the last two years preceding the valuation date. The adjusted market value is the market value at each determination date adjusted to the valuation date based on actual cash flows and expected interest at the lesser of the expected rate of return and the third segment rate. This amount is adjusted to be no greater than 110 percent and no less than 90 percent of the fair market value, as defined in IRC Section 430.

A characteristic of this asset method is that, over time, it is slightly more likely to produce an actuarial value of assets that is less than the market value of assets than an actuarial value that is greater than the market value.

Participant Methods – Effective January 1, 2008

Participants or former participants are included or excluded from the valuation as described below:

- **Participants included:** The plan sponsor and Willis Towers Watson provided us with participant data as of the valuation date.
- **Participants excluded:** No actuarial liability is included for non-vested participants who terminated prior to the valuation date. For this purpose, participants with a break in service on the valuation date are treated as terminated participants.
- **Insurance contracts:** The plan does not have any insurance contracts.

*Schedule SB, Part V — Statement of Actuarial Assumption/Methods***Minimum Funding Methods – Effective January 1, 2008**

The funding target for minimum funding calculations is computed using the traditional unit credit method of funding. The objective under this method is to fund each participant's benefits under the plan as they accrue. Thus, the total pension to which each participant is expected to become entitled at retirement is broken down into units, each associated with a year of past or future credited service.

A detailed description of the calculation follows:

- The plan's valuation date is the beginning of the plan year.
- An individual's **funding target** is the present value of future benefits based on credited service and average pay as of the beginning of the plan year, and an individual's **target normal cost** is the present value of the benefit expected to accrue in the plan year. If multiple decrements are used, the funding target and the target normal cost for an individual is the sum of the component funding targets and target normal costs associated with the various anticipated separation dates.
- The plan's **target normal cost** is the sum of the individual target normal costs, and the plan's **funding target** is the sum of the individual funding targets for all participants under the plan.

*Schedule SB, Part V — Summary of Plan Provisions***SUMMARY OF MAJOR PLAN PROVISIONS**

Effective date and plan year	Restated plan: January 1, 2009 Plan year: Calendar year
Status of the plan	The plan has ongoing benefit accruals and, except for Kansas City USWA, new employees are eligible to participate in the plan once they satisfy the participation requirements.
Significant events that occurred during the year	Benefits for Aurora IAM participants were updated due to negotiation.

DEFINITIONS

- **Employees Covered** All hourly employees of the Pentair Pump Group, Inc. employed in an hourly rate position, and represented by a union. Kansas City USWA employees hired after January 1, 2015 are not eligible for the plan. F.E. Meyers (Ashland) GMP employees hired after 4/5/2011 are not eligible for the plan. Aurora IAM employees hired after 1/1/2018 will not participate in the plan.
- **Participation** All covered employees participate upon completing one year of service and attaining age 21.
- **Vesting service** Full and fractional years of service. Any fractional remainder of days less than 30 shall be treated as one month.
- **Credited service** Full and fractional years of service, with service earned for any month in which one or more days are worked. Employees of the former General Signal locations begin earning credited service on the later of their hire date or August 23, 1997.

*Schedule SB, Part V — Summary of Plan Provisions***NORMAL RETIREMENT**

- Eligibility Later of age 65 and five years of participation.

- Benefit Amount equal to product of (a) and (b):

(a) Number of years of credited service (limited to 37 years for Molders).

(b) The benefit rate shown below:

Effective Date	Machinists	Molders	Ashland	Kansas City	Aurora
1/01/88	\$ 12.00	\$ 10.25			
4/04/88	12.00	10.50			
4/03/89	12.50	10.75			
9/01/89	12.50	10.75			
4/02/90	13.00	11.00			
9/01/90	13.00	11.00			
4/01/91	13.50	11.00			
5/01/92	14.00	11.00			
4/01/97	14.00	11.00			
8/23/97	14.00	11.00	\$17.00	\$19.50	\$20.00
10/1/01	14.00	11.00	17.00	20.50	20.00
6/23/02	14.00	11.00	17.00	20.50	21.00
10/1/02	14.00	11.00	18.00	20.50	21.00
10/1/03		11.00	18.50	21.00	21.00
6/21/04			18.50	21.00	21.50
1/01/05			15.50	21.00	21.50
10/1/06				22.00	21.50
6/25/07					22.00
6/22/09					22.50
6/21/11					23.00
6/25/12					24.00
6/23/14					25.00
6/22/15					25.50
6/20/16					26.00
6/25/17					27.25
6/23/18					28.25
6/22/19					29.50
6/20/20					30.50
6/20/21					31.75

*Schedule SB, Part V — Summary of Plan Provisions***NORMAL RETIREMENT**
(CONTINUED)

The Ashland (Hydromatic) plant closed December 31, 2004. Any active employee as of January 1, 2005 has an accrued benefit based on \$18.50 per year of service, and will receive F.E. Myers IAM benefit rates for future service as they are now F.E. Myers IAM employees. F.E. Myers IAM employees have a benefit equal to their credited service through 4/6/2003 times \$14.00 plus credited service from 4/7/2003 to 4/4/2004 times \$15.00 plus credited service from 4/5/2004 to 4/6/2008 times \$15.50 plus credited service from 4/7/2008 to 4/6/2009 times \$16.00 plus credited service from 4/7/2009 to 4/6/2010 times \$16.50 plus credited service from 4/7/2010 to 4/6/2011 times \$17.00 plus credited service from 4/7/2011 to 4/6/2012 times \$17.50 plus credited service from 4/7/2012 to 4/6/2013 times \$18.00 plus credited service from 4/7/2013 to 4/6/2015 times \$19.00 plus credited service from 4/7/2015 to 4/6/2017 times \$20.00 plus credited service from 4/7/2017 times \$21.00.

F.E. Myers GMP employees have a benefit equal to their credited service through 4/3/2004 times \$11.00 plus credited service from 4/4/2004 to 4/2/2006 times \$12.00 plus credited service from 4/3/2006 to 3/31/2016 times \$12.50 plus credited service after 4/1/2016 times \$13.00.

Kansas City (Fairbanks Morse) employees have a benefit equal to their credited service through 10/1/2009 times \$22.00 plus credited service from 10/1/2009 to 10/1/2014 times \$23.50 plus credited service from 10/1/2014 times \$25.00.

*Schedule SB, Part V — Summary of Plan Provisions***EARLY RETIREMENT**

• Eligibility

Eligible on or after age 55 and 15 years of vesting service.

• Benefit

Amount equal to the normal retirement benefit, based on service at termination reduced by 0.6% for each month commencement precedes normal retirement. Kansas City employees who had attained age 50 and had five years of service as of October 1, 1996 have benefits reduced for early retirement based on the following table:

<u>Retirement Age</u>	<u>Reduction Factor</u>
64	3%
63	5
62	9
61	13
60	17
59	30
58	35
57	40
56	45
55	50

LATE RETIREMENT

• Eligibility

Eligible after the normal retirement date.

• Benefit

Greater of the normal retirement benefit actuarially increased to the earlier of the date the suspension of benefits notice was given and the date of termination, and the benefit at date of termination.

*Schedule SB, Part V — Summary of Plan Provisions***DEFERRED VESTED**

- Eligibility Eligible on or after five years of vesting service.
- Benefit Amount equal to the normal retirement benefit using the credited service and dollar amounts at date of termination, with payments commencing at age 65. May commence as early as age 55 if 15 years of vesting service, with a reduction for early retirement (as shown above).

DISABILITY

- Eligibility Eligible on or after age 40 and 15 years of vesting service.
- Benefit Amount equal to the normal retirement benefit accrued to date of disability, commencing immediately, offset by other disability benefits payable to the participant.

PRE-RETIREMENT DEATH

- Eligibility Eligible on or after five years of vesting service.
- Benefit Amount equal to 50% of the benefit the participant would have received had he retired under a 50% joint and survivor annuity on the first of the month following his death, or his earliest commencement age, if not yet eligible.

FORM OF BENEFITS

- Automatic form for unmarried participants Life annuity.
- Automatic form for married participants 50% Joint & Survivor.
- Optional forms Life annuity, 50% Joint & Survivor, 66 2/3% Joint & Survivor, 75% Joint & Survivor, 100% Joint & Survivor.

**OPTIONAL FORM OF
CONVERSION FACTORS**

UP84 mortality and 7% interest.

MISCELLANEOUS

- Maximum benefits Annual benefits may not exceed the limits in IRC Section 415. This limit is indexed annually. For 2017, the limit is \$215,000.

*Schedule SB, Part V — Summary of Plan Provisions***Benefits Included or Excluded**

Unless noted below, all benefits provided by the plan are included in this valuation.

- **Plan amendments excluded:** None.
- **Late retirement increases:**
 - *Active participants:* The plan provides benefit suspension notices to participants who work beyond normal retirement; therefore, late retirement actuarial increases only apply to participants who defer retirement beyond age 70½.
 - *Deferred vested participants:* Current deferred vested participants over normal retirement age are valued including the late retirement actuarial increase.
- **Internal Revenue Code limitations:** The limitations of Internal Revenue Code Section 415(b) and 401(a)(17) have been incorporated into our calculations.
- **IRC Section 416 rules for top-heavy plans:** We did not test whether this plan is top-heavy (when the present value of benefits for key employees equals or exceeds 60% of the present value for all participants). However, we expect that the plan is not top-heavy due to the large number of rank-and-file participants; therefore, the funding target and target normal cost do not reflect any liability for top-heavy benefit accruals.

Schedule SB, Part V — Summary of Plan Provisions

PLAN PROVISIONS SPECIFIC TO FUNDING

Additional Benefits Included or Excluded• **IRC Section 436 benefit restrictions:**

- *Unpredictable contingent event benefits:* See below.
- *Plan amendments:* See above.
- *Prohibited payments:* Limitations on prohibited benefits (if any) are reflected for annuity starting dates before the valuation date but are ignored for annuity starting dates on or after the valuation date.
- *Benefit accruals:* The plan's funding target does not reflect any limitation on benefit accruals. The target normal cost does not reflect any limitation on benefit accruals.

- **Scheduled benefit increases:** Scheduled benefit increases effective after the end of the current plan year are excluded from minimum funding requirements.
- **Unpredictable contingent event benefits:** The plan does not have any unpredictable contingent event benefits.

PLAN PROVISION CHANGES SINCE PRIOR VALUATION

- IRC 415(b) maximum benefit was updated from 2016 to 2017.

Schedule SB, line 24 — Change in Actuarial Assumptions

ACTUARIAL ASSUMPTION CHANGES SINCE PRIOR VALUATION

Funding

- The expected investment return on assets was changed from 4.28% to 4.11%.
- The administrative expense load was changed from \$145,000 to \$151,000.

Schedule SB, line 26 — Schedule of Active Participant Data

ATTAINED AGE	YEARS OF CREDITED SERVICE										TOTAL
	UNDER 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & UP	
Under 25		4									4
25-29		4	7								11
30-34		6	9	3							18
35-39		5	9	5	5	2					26
40-44		1	10	2	7	6	1				27
45-49		3	8	6	10	11	9				47
50-54		5	12	6	15	3	4	1	1		47
55-59		4	8	5	33	2	3		13		68
60-64		1	7	5	29		2		14	7	65
65-69			1		8						9
70 & up			1		2						3
Total		33	72	32	109	24	19	1	28	7	325

In each cell, the number is the count of active participants for each age/service combination.

Schedule SB, line 32 — Schedule of Amortization Bases

The total shortfall amortization charge is the sum of the individual shortfall amortization installment for each plan year since the IRC Section 430 changes made by the Pension Protection Act of 2006 (PPA) took effect for the plan. Although an individual shortfall amortization installment can be negative, the combined shortfall amortization charge cannot be less than \$0.

SHORTFALL BASES					
YEAR ESTABLISHED		OUTSTANDING BALANCE	YEARS REMAINING		2017 INSTALLMENT
2015	\$	873,251	5	\$	189,169
2016	\$	322,929	6		60,097
2017		(140,248)	7		(23,030)
Total	\$	1,055,932		\$	226,236

SCHEDULE SB (Form 5500) <small>Department of the Treasury Internal Revenue Service</small> <small>Department of Labor Employee Benefits Security Administration</small> <small>Pension Benefit Guaranty Corporation</small>	Single-Employer Defined Benefit Plan Actuarial Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6059 of the Internal Revenue Code (the Code). ► File as an attachment to Form 5500 or 5500-SF.	OMB No. 1210-0110 2017 This Form is Open to Public Inspection
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For calendar plan year 2017 or fiscal plan year beginning <u>01/01/2017</u> and ending <u>12/31/2017</u>			
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E Type of plan: ☒ Single ☐ Multiple-A ☐ Multiple-B F Prior year plan size: ☐ 100 or fewer ☐ 101-500 ☒ More than 500			

Part I Basic Information				
1 Enter the valuation date: Month <u>01</u> Day <u>01</u> Year <u>2017</u>				
2 Assets:				
a Market value.....	2a	17,549,803		
b Actuarial value.....	2b	17,454,937		
3 Funding target/participant count breakdown	(1) Number of participants	(2) Vested Funding Target	(3) Total Funding Target	
a For retired participants and beneficiaries receiving payment	78	3,527,339	3,527,339	
b For terminated vested participants	146	2,223,724	2,223,724	
c For active participants	325	7,748,332	7,828,430	
d Total.....	549	13,499,395	13,579,493	
4 If the plan is in at-risk status, check the box and complete lines (a) and (b) ☐				
a Funding target disregarding prescribed at-risk assumptions.....	4a			
b Funding target reflecting at-risk assumptions, but disregarding transition rule for plans that have been in at-risk status for fewer than five consecutive years and disregarding loading factor.....	4b			
5 Effective interest rate.....	5	6.03%		
6 Target normal cost	6	568,860		

Statement by Enrolled Actuary
 To the best of my knowledge, the information supplied in this schedule and accompanying schedules, statements and attachments, if any, is complete and accurate. Each prescribed assumption was applied in accordance with applicable law and regulations. In my opinion, each other assumption is reasonable (taking into account the experience of the plan and reasonable expectations) and such other assumptions, in combination, offer my best estimate of anticipated experience under the plan.

SIGN HERE		<u>9/25/2018</u>
	Signature of actuary	Date
	GREGORY T. TRAPP, ASA, EA, MAAA	1705207
	Type or print name of actuary	Most recent enrollment number
	MERCER	612-642-8600
	Firm name	Telephone number (including area code)
	333 SOUTH 7TH STREET, SUITE 1400	
	MINNEAPOLIS MN 55402-2427	
	Address of the firm	

If the actuary has not fully reflected any regulation or ruling promulgated under the statute in completing this schedule, check the box and see instructions ☐

For Paperwork Reduction Act Notice, see the Instructions for Form 5500 or 5500-SF. **Schedule SB (Form 5500) 2017**

Part II Beginning of Year Carryover and Prefunding Balances

	(a) Carryover balance	(b) Prefunding balance
7 Balance at beginning of prior year after applicable adjustments (line 13 from prior year).....	0	5,362,384
8 Portion elected for use to offset prior year's funding requirement (line 35 from prior year)	0	814,822
9 Amount remaining (line 7 minus line 8).....	0	4,547,562
10 Interest on line 9 using prior year's actual return of <u>8.44%</u>	0	383,814
11 Prior year's excess contributions to be added to prefunding balance:		
a Present value of excess contributions (line 38a from prior year)		0
b(1) Interest on the excess, if any, of line 38a over line 38b from prior year Schedule SB, using prior year's effective interest rate of <u>6.23%</u>		0
b(2) Interest on line 38b from prior year Schedule SB, using prior year's actual return		0
c Total available at beginning of current plan year to add to prefunding balance.....		0
d Portion of (c) to be added to prefunding balance.....		0
12 Other reductions in balances due to elections or deemed elections		
13 Balance at beginning of current year (line 9 + line 10 + line 11d – line 12)	0	4,931,376

Part III Funding Percentages

14 Funding target attainment percentage	14	92.22%
15 Adjusted funding target attainment percentage.....	15	128.53%
16 Prior year's funding percentage for purposes of determining whether carryover/prefunding balances may be used to reduce current year's funding requirement	16	88.94%
17 If the current value of the assets of the plan is less than 70 percent of the funding target, enter such percentage.	17	%

Part IV Contributions and Liquidity Shortfalls

18 Contributions made to the plan for the plan year by employer(s) and employees:					
(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees	(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees
09/10/2018	710,000	0			
Totals ▶			18(b)	710,000	18(c) 0

19 Discounted employer contributions – see instructions for small plan with a valuation date after the beginning of the year:			
a Contributions allocated toward unpaid minimum required contributions from prior years.....	19a		0
b Contributions made to avoid restrictions adjusted to valuation date	19b		0
c Contributions allocated toward minimum required contribution for current year adjusted to valuation date.....	19c		643,092
20 Quarterly contributions and liquidity shortfalls:			
a Did the plan have a “funding shortfall” for the prior year?.....			☒ Yes ☐ No
b If line 20a is “Yes,” were required quarterly installments for the current year made in a timely manner?			☐ Yes ☒ No
c If line 20a is “Yes,” see instructions and complete the following table as applicable:			
Liquidity shortfall as of end of quarter of this plan year			
(1) 1st	(2) 2nd	(3) 3rd	(4) 4th
0	0	0	0

Part V Assumptions Used to Determine Funding Target and Target Normal Cost

21 Discount rate:				
a Segment rates:	1st segment: 4.16 %	2nd segment: 5.72 %	3rd segment: 6.48 %	☐ N/A, full yield curve used
b Applicable month (enter code)				21b 4
22 Weighted average retirement age				22 65
23 Mortality table(s) (see instructions)	☐ Prescribed - combined	☒ Prescribed - separate	☐ Substitute	

Part VI Miscellaneous Items

24 Has a change been made in the non-prescribed actuarial assumptions for the current plan year? If "Yes," see instructions regarding required attachment.	☒ Yes ☐ No
25 Has a method change been made for the current plan year? If "Yes," see instructions regarding required attachment.	☐ Yes ☒ No
26 Is the plan required to provide a Schedule of Active Participants? If "Yes," see instructions regarding required attachment.	☒ Yes ☐ No
27 If the plan is subject to alternative funding rules, enter applicable code and see instructions regarding attachment	27

Part VII Reconciliation of Unpaid Minimum Required Contributions For Prior Years

28 Unpaid minimum required contributions for all prior years	28	0
29 Discounted employer contributions allocated toward unpaid minimum required contributions from prior years (line 19a)	29	0
30 Remaining amount of unpaid minimum required contributions (line 28 minus line 29)	30	0

Part VIII Minimum Required Contribution For Current Year

31 Target normal cost and excess assets (see instructions):			
a Target normal cost (line 6)	31a	568,860	
b Excess assets, if applicable, but not greater than line 31a	31b	0	
32 Amortization installments:			
a Net shortfall amortization installment	Outstanding Balance	Installment	
b Waiver amortization installment	1,055,932	226,236	
	0	0	
33 If a waiver has been approved for this plan year, enter the date of the ruling letter granting the approval (Month _____ Day _____ Year _____) and the waived amount	33		
34 Total funding requirement before reflecting carryover/prefunding balances (lines 31a - 31b + 32a + 32b - 33)....	34	795,096	
	Carryover balance	Prefunding balance	Total balance
35 Balances elected for use to offset funding requirement	0	795,096	795,096
36 Additional cash requirement (line 34 minus line 35)	36	0	
37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c)	37	643,092	
38 Present value of excess contributions for current year (see instructions)			
a Total (excess, if any, of line 37 over line 36)	38a	643,092	
b Portion included in line 38a attributable to use of prefunding and funding standard carryover balances	38b	643,092	
39 Unpaid minimum required contribution for current year (excess, if any, of line 36 over line 37)	39	0	
40 Unpaid minimum required contributions for all years	40	0	

Part IX Pension Funding Relief Under Pension Relief Act of 2010 (See Instructions)

41 If an election was made to use PRA 2010 funding relief for this plan:			
a Schedule elected	☐ 2 plus 7 years	☐ 15 years	
b Eligible plan year(s) for which the election in line 41a was made	☐ 2008	☐ 2009	☐ 2010 ☐ 2011
42 Amount of acceleration adjustment	42		
43 Excess installment acceleration amount to be carried over to future plan years	43		

Schedule SB, Line 8 – Late Election to Apply Balances to Quarterly Installments

The balances used to offset funding requirement reported on line 35 of the 2016 Schedule SB was \$814,349 of prefunding balance. The portion used to offset prior year's funding requirement reported on line 8a of the 2017 Schedule SB is \$814,822. The discrepancy is a result of the sponsor making a late election to apply carryover balance to quarterly funding requirements. The amount shown on line 8a of the 2017 Schedule SB reflects an interest penalty of \$473 for the late election.

Schedule SB, Part V — Statement of Actuarial Assumption/Methods

ACTUARIAL ASSUMPTIONS FOR JANUARY 1, 2017 FUNDING VALUATION

DISCOUNT RATE SPONSOR ELECTIONS			
------------------------------------	--	--	--

- Segment rates or full yield curve Segment
- Look-back months 4
- Use stabilized rates – funding Yes
- Use stabilized rates – Section 436 benefit restrictions Yes

	<u>Stabilized rates</u> (BBA'17)	<u>Nonstabilized rates</u>
• First 5 years	4.16%	1.52%
• Next 15 years	5.72%	3.80%
• Over 20 years	6.48%	4.79%

Rationale: Prescribed assumption by the IRS and the PBGC

*Schedule SB, Part V — Statement of Actuarial Assumption/Methods***MORTALITY SPONSOR
ELECTIONS**

Section 430(h)(3) prescribed separate static annuitant and nonannuitant mortality tables. These tables are based on the RP-2000 mortality tables projected with mortality improvement to the valuation year plus 7 and 15 years based on Scale AA.

Rationale: Prescribed assumption by the IRS

OTHER ECONOMIC ASSUMPTIONS

- Expected investment return 3.65% for year 2015, 4.28% for year 2016 and 4.11% for year 2017.
Rationale: Based on the expected yield of a dedicated high quality bond portfolio constructed to match the qualified pension plan's projected benefit payments.
- Expenses \$151,000 added to current year normal cost.
Rationale: Prior year's actual administrative expense adjusted for expected changes in PBGC premiums.

DEMOGRAPHIC ASSUMPTIONS

- Withdrawal Sum of (a) and (b)
 - a) Three times the rates in the Massachusetts Mutual A. Table for Males.
 - b) Two times Hunter's Rates for males and four times Hunter's Rates for females.

See table of sample rates.
- Disability incidence **None.**
- Retirement age Age 65. (Individuals employed at the Kansas City location who had attained age 50 and earned five years of credited service as of October 1, 1996 are assumed to retire at age 62.)
- Benefit commencement age for
 - Future vested deferred 65
 - Current vested deferred 65
- Spouse assumptions **MALE PARTICIPANTS** **FEMALE PARTICIPANTS**

Schedule SB, Part V — Statement of Actuarial Assumption/Methods

– Percentage married	75%	75%	
– Spouse age difference	2 years younger	2 years older	
FORM OF PAYMENT	<u>SINGLE LIFE</u>	<u>50% J&S</u>	<u>100% J&S</u>
• Active retirements	50%	25%	25%
• Future vested deferred	50%	25%	25%
• Future deaths	100%	0%	0%
• Current vested deferred	50%	25%	25%
UNPREDICTABLE CONTINGENT EVENT ASSUMPTIONS	N/A		

Table of Sample Rates

ATTAINED AGE	WITHDRAWAL	
	MALE	FEMALE
20	22.3%	22.4%
25	16.3%	16.4%
30	10.3%	10.4%
35	7.2%	7.3%
40	4.1%	4.2%
45	2.2%	2.4%
50	0.3%	0.7%
55	0.6%	1.1%

Schedule SB, Part V — Statement of Actuarial Assumption/Methods

60	1.1%	2.2%
----	------	------

Rationale for demographic and form of payment assumptions: The plan sponsor believes these assumptions to be reasonable and representative of current and future expected experience. The plan's signing actuary monitors experience annually and has not detected any significant gains or losses.

ACTUARIAL METHODS FOR FUNDING**Asset Methods – effective January 1, 2009**

The asset valuation method is an average of the adjusted market value for each year during the last two years preceding the valuation date. The adjusted market value is the market value at each determination date adjusted to the valuation date based on actual cash flows and expected interest at the lesser of the expected rate of return and the third segment rate. This amount is adjusted to be no greater than 110 percent and no less than 90 percent of the fair market value, as defined in IRC Section 430.

A characteristic of this asset method is that, over time, it is slightly more likely to produce an actuarial value of assets that is less than the market value of assets than an actuarial value that is greater than the market value.

Participant Methods – Effective January 1, 2008

Participants or former participants are included or excluded from the valuation as described below:

- **Participants included:** The plan sponsor and Willis Towers Watson provided us with participant data as of the valuation date.
- **Participants excluded:** No actuarial liability is included for non-vested participants who terminated prior to the valuation date. For this purpose, participants with a break in service on the valuation date are treated as terminated participants.
- **Insurance contracts:** The plan does not have any insurance contracts.

*Schedule SB, Part V — Statement of Actuarial Assumption/Methods***Minimum Funding Methods – Effective January 1, 2008**

The funding target for minimum funding calculations is computed using the traditional unit credit method of funding. The objective under this method is to fund each participant's benefits under the plan as they accrue. Thus, the total pension to which each participant is expected to become entitled at retirement is broken down into units, each associated with a year of past or future credited service.

A detailed description of the calculation follows:

- The plan's valuation date is the beginning of the plan year.
- An individual's **funding target** is the present value of future benefits based on credited service and average pay as of the beginning of the plan year, and an individual's **target normal cost** is the present value of the benefit expected to accrue in the plan year. If multiple decrements are used, the funding target and the target normal cost for an individual is the sum of the component funding targets and target normal costs associated with the various anticipated separation dates.
- The plan's **target normal cost** is the sum of the individual target normal costs, and the plan's **funding target** is the sum of the individual funding targets for all participants under the plan.

*Schedule SB, Part V — Summary of Plan Provisions***SUMMARY OF MAJOR PLAN PROVISIONS**

Effective date and plan year	Restated plan: January 1, 2009 Plan year: Calendar year
Status of the plan	The plan has ongoing benefit accruals and, except for Kansas City USWA, new employees are eligible to participate in the plan once they satisfy the participation requirements.
Significant events that occurred during the year	Benefits for Aurora IAM participants were updated due to negotiation.

DEFINITIONS

- **Employees Covered** All hourly employees of the Pentair Pump Group, Inc. employed in an hourly rate position, and represented by a union. Kansas City USWA employees hired after January 1, 2015 are not eligible for the plan. F.E. Meyers (Ashland) GMP employees hired after 4/5/2011 are not eligible for the plan. Aurora IAM employees hired after 1/1/2018 will not participate in the plan.
- **Participation** All covered employees participate upon completing one year of service and attaining age 21.
- **Vesting service** Full and fractional years of service. Any fractional remainder of days less than 30 shall be treated as one month.
- **Credited service** Full and fractional years of service, with service earned for any month in which one or more days are worked. Employees of the former General Signal locations begin earning credited service on the later of their hire date or August 23, 1997.

*Schedule SB, Part V — Summary of Plan Provisions***NORMAL RETIREMENT**

- Eligibility Later of age 65 and five years of participation.

- Benefit Amount equal to product of (a) and (b):

(a) Number of years of credited service (limited to 37 years for Molders).

(b) The benefit rate shown below:

Effective Date	Machinists	Molders	Ashland	Kansas City	Aurora
1/01/88	\$ 12.00	\$ 10.25			
4/04/88	12.00	10.50			
4/03/89	12.50	10.75			
9/01/89	12.50	10.75			
4/02/90	13.00	11.00			
9/01/90	13.00	11.00			
4/01/91	13.50	11.00			
5/01/92	14.00	11.00			
4/01/97	14.00	11.00			
8/23/97	14.00	11.00	\$17.00	\$19.50	\$20.00
10/1/01	14.00	11.00	17.00	20.50	20.00
6/23/02	14.00	11.00	17.00	20.50	21.00
10/1/02	14.00	11.00	18.00	20.50	21.00
10/1/03		11.00	18.50	21.00	21.00
6/21/04			18.50	21.00	21.50
1/01/05			15.50	21.00	21.50
10/1/06				22.00	21.50
6/25/07					22.00
6/22/09					22.50
6/21/11					23.00
6/25/12					24.00
6/23/14					25.00
6/22/15					25.50
6/20/16					26.00
6/25/17					27.25
6/23/18					28.25
6/22/19					29.50
6/20/20					30.50
6/20/21					31.75

*Schedule SB, Part V — Summary of Plan Provisions***NORMAL RETIREMENT**
(CONTINUED)

The Ashland (Hydromatic) plant closed December 31, 2004. Any active employee as of January 1, 2005 has an accrued benefit based on \$18.50 per year of service, and will receive F.E. Myers IAM benefit rates for future service as they are now F.E. Myers IAM employees. F.E. Myers IAM employees have a benefit equal to their credited service through 4/6/2003 times \$14.00 plus credited service from 4/7/2003 to 4/4/2004 times \$15.00 plus credited service from 4/5/2004 to 4/6/2008 times \$15.50 plus credited service from 4/7/2008 to 4/6/2009 times \$16.00 plus credited service from 4/7/2009 to 4/6/2010 times \$16.50 plus credited service from 4/7/2010 to 4/6/2011 times \$17.00 plus credited service from 4/7/2011 to 4/6/2012 times \$17.50 plus credited service from 4/7/2012 to 4/6/2013 times \$18.00 plus credited service from 4/7/2013 to 4/6/2015 times \$19.00 plus credited service from 4/7/2015 to 4/6/2017 times \$20.00 plus credited service from 4/7/2017 times \$21.00.

F.E. Myers GMP employees have a benefit equal to their credited service through 4/3/2004 times \$11.00 plus credited service from 4/4/2004 to 4/2/2006 times \$12.00 plus credited service from 4/3/2006 to 3/31/2016 times \$12.50 plus credited service after 4/1/2016 times \$13.00.

Kansas City (Fairbanks Morse) employees have a benefit equal to their credited service through 10/1/2009 times \$22.00 plus credited service from 10/1/2009 to 10/1/2014 times \$23.50 plus credited service from 10/1/2014 times \$25.00.

*Schedule SB, Part V — Summary of Plan Provisions***EARLY RETIREMENT**

• Eligibility

Eligible on or after age 55 and 15 years of vesting service.

• Benefit

Amount equal to the normal retirement benefit, based on service at termination reduced by 0.6% for each month commencement precedes normal retirement. Kansas City employees who had attained age 50 and had five years of service as of October 1, 1996 have benefits reduced for early retirement based on the following table:

<u>Retirement Age</u>	<u>Reduction Factor</u>
64	3%
63	5
62	9
61	13
60	17
59	30
58	35
57	40
56	45
55	50

LATE RETIREMENT

• Eligibility

Eligible after the normal retirement date.

• Benefit

Greater of the normal retirement benefit actuarially increased to the earlier of the date the suspension of benefits notice was given and the date of termination, and the benefit at date of termination.

*Schedule SB, Part V — Summary of Plan Provisions***DEFERRED VESTED**

- Eligibility Eligible on or after five years of vesting service.
- Benefit Amount equal to the normal retirement benefit using the credited service and dollar amounts at date of termination, with payments commencing at age 65. May commence as early as age 55 if 15 years of vesting service, with a reduction for early retirement (as shown above).

DISABILITY

- Eligibility Eligible on or after age 40 and 15 years of vesting service.
- Benefit Amount equal to the normal retirement benefit accrued to date of disability, commencing immediately, offset by other disability benefits payable to the participant.

PRE-RETIREMENT DEATH

- Eligibility Eligible on or after five years of vesting service.
- Benefit Amount equal to 50% of the benefit the participant would have received had he retired under a 50% joint and survivor annuity on the first of the month following his death, or his earliest commencement age, if not yet eligible.

FORM OF BENEFITS

- Automatic form for unmarried participants Life annuity.
- Automatic form for married participants 50% Joint & Survivor.
- Optional forms Life annuity, 50% Joint & Survivor, 66 2/3% Joint & Survivor, 75% Joint & Survivor, 100% Joint & Survivor.

**OPTIONAL FORM OF
CONVERSION FACTORS**

UP84 mortality and 7% interest.

MISCELLANEOUS

- Maximum benefits Annual benefits may not exceed the limits in IRC Section 415. This limit is indexed annually. For 2017, the limit is \$215,000.

*Schedule SB, Part V — Summary of Plan Provisions***Benefits Included or Excluded**

Unless noted below, all benefits provided by the plan are included in this valuation.

- **Plan amendments excluded:** None.
- **Late retirement increases:**
 - *Active participants:* The plan provides benefit suspension notices to participants who work beyond normal retirement; therefore, late retirement actuarial increases only apply to participants who defer retirement beyond age 70½.
 - *Deferred vested participants:* Current deferred vested participants over normal retirement age are valued including the late retirement actuarial increase.
- **Internal Revenue Code limitations:** The limitations of Internal Revenue Code Section 415(b) and 401(a)(17) have been incorporated into our calculations.
- **IRC Section 416 rules for top-heavy plans:** We did not test whether this plan is top-heavy (when the present value of benefits for key employees equals or exceeds 60% of the present value for all participants). However, we expect that the plan is not top-heavy due to the large number of rank-and-file participants; therefore, the funding target and target normal cost do not reflect any liability for top-heavy benefit accruals.

Schedule SB, Part V — Summary of Plan Provisions

PLAN PROVISIONS SPECIFIC TO FUNDING

Additional Benefits Included or Excluded• **IRC Section 436 benefit restrictions:**

- *Unpredictable contingent event benefits:* See below.
- *Plan amendments:* See above.
- *Prohibited payments:* Limitations on prohibited benefits (if any) are reflected for annuity starting dates before the valuation date but are ignored for annuity starting dates on or after the valuation date.
- *Benefit accruals:* The plan's funding target does not reflect any limitation on benefit accruals. The target normal cost does not reflect any limitation on benefit accruals.

- **Scheduled benefit increases:** Scheduled benefit increases effective after the end of the current plan year are excluded from minimum funding requirements.
- **Unpredictable contingent event benefits:** The plan does not have any unpredictable contingent event benefits.

PLAN PROVISION CHANGES SINCE PRIOR VALUATION

- IRC 415(b) maximum benefit was updated from 2016 to 2017.

Schedule SB, line 24 — Change in Actuarial Assumptions

ACTUARIAL ASSUMPTION CHANGES SINCE PRIOR VALUATION

Funding

- The expected investment return on assets was changed from 4.28% to 4.11%.
- The administrative expense load was changed from \$145,000 to \$151,000.

Schedule SB, line 26 — Schedule of Active Participant Data

ATTAINED AGE	YEARS OF CREDITED SERVICE										TOTAL
	UNDER 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & UP	
Under 25		4									4
25-29		4	7								11
30-34		6	9	3							18
35-39		5	9	5	5	2					26
40-44		1	10	2	7	6	1				27
45-49		3	8	6	10	11	9				47
50-54		5	12	6	15	3	4	1	1		47
55-59		4	8	5	33	2	3		13		68
60-64		1	7	5	29		2		14	7	65
65-69			1		8						9
70 & up			1		2						3
Total		33	72	32	109	24	19	1	28	7	325

In each cell, the number is the count of active participants for each age/service combination.

Schedule SB, line 32 — Schedule of Amortization Bases

The total shortfall amortization charge is the sum of the individual shortfall amortization installment for each plan year since the IRC Section 430 changes made by the Pension Protection Act of 2006 (PPA) took effect for the plan. Although an individual shortfall amortization installment can be negative, the combined shortfall amortization charge cannot be less than \$0.

SHORTFALL BASES					
YEAR ESTABLISHED		OUTSTANDING BALANCE	YEARS REMAINING		2017 INSTALLMENT
2015	\$	873,251	5	\$	189,169
2016	\$	322,929	6		60,097
2017		(140,248)	7		(23,030)
Total	\$	1,055,932		\$	226,236

SCHEDULE SB (Form 5500) <small>Department of the Treasury Internal Revenue Service</small> <small>Department of Labor Employee Benefits Security Administration</small> <small>Pension Benefit Guaranty Corporation</small>	Single-Employer Defined Benefit Plan Actuarial Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6059 of the Internal Revenue Code (the Code). ► File as an attachment to Form 5500 or 5500-SF.	OMB No. 1210-0110 2017 This Form is Open to Public Inspection
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For calendar plan year 2017 or fiscal plan year beginning <u>01/01/2017</u> and ending <u>12/31/2017</u>			
► Round off amounts to nearest dollar.			
► Caution: A penalty of \$1,000 will be assessed for late filing of this report unless reasonable cause is established.			
A Name of plan PENTAIR PUMP GROUP, INC. BARGAINING UNIT EMPLOYEES PENSION PLAN	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:60%;">B Three-digit plan number (PN) ►</td> <td style="width:40%; text-align: center;">002</td> </tr> </table>	B Three-digit plan number (PN) ►	002
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Statement by Enrolled Actuary
 To the best of my knowledge, the information supplied in this schedule and accompanying schedules, statements and attachments, if any, is complete and accurate. Each prescribed assumption was applied in accordance with applicable law and regulations. In my opinion, each other assumption is reasonable (taking into account the experience of the plan and reasonable expectations) and such other assumptions, in combination, offer my best estimate of anticipated experience under the plan.

SIGN HERE		<u>9/25/2018</u>
Signature of actuary		Date
GREGORY T. TRAPP, ASA, EA, MAAA		1705207
Type or print name of actuary		Most recent enrollment number
MERCER		612-642-8600
Firm name		Telephone number (including area code)
333 SOUTH 7TH STREET, SUITE 1400		
MINNEAPOLIS MN 55402-2427		
Address of the firm		

If the actuary has not fully reflected any regulation or ruling promulgated under the statute in completing this schedule, check the box and see instructions ☐

For Paperwork Reduction Act Notice, see the Instructions for Form 5500 or 5500-SF. **Schedule SB (Form 5500) 2017**

Part II Beginning of Year Carryover and Prefunding Balances

	(a) Carryover balance	(b) Prefunding balance
7 Balance at beginning of prior year after applicable adjustments (line 13 from prior year).....	0	5,362,384
8 Portion elected for use to offset prior year's funding requirement (line 35 from prior year)	0	814,822
9 Amount remaining (line 7 minus line 8).....	0	4,547,562
10 Interest on line 9 using prior year's actual return of <u>8.44%</u>	0	383,814
11 Prior year's excess contributions to be added to prefunding balance:		
a Present value of excess contributions (line 38a from prior year)		0
b(1) Interest on the excess, if any, of line 38a over line 38b from prior year Schedule SB, using prior year's effective interest rate of <u>6.23%</u>		0
b(2) Interest on line 38b from prior year Schedule SB, using prior year's actual return		0
c Total available at beginning of current plan year to add to prefunding balance.....		0
d Portion of (c) to be added to prefunding balance.....		0
12 Other reductions in balances due to elections or deemed elections		
13 Balance at beginning of current year (line 9 + line 10 + line 11d – line 12)	0	4,931,376

Part III Funding Percentages

14 Funding target attainment percentage	14	92.22%
15 Adjusted funding target attainment percentage.....	15	128.53%
16 Prior year's funding percentage for purposes of determining whether carryover/prefunding balances may be used to reduce current year's funding requirement	16	88.94%
17 If the current value of the assets of the plan is less than 70 percent of the funding target, enter such percentage.	17	%

Part IV Contributions and Liquidity Shortfalls

18 Contributions made to the plan for the plan year by employer(s) and employees:					
(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees	(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees
09/10/2018	710,000	0			
Totals ▶			18(b)	710,000	18(c) 0

19 Discounted employer contributions – see instructions for small plan with a valuation date after the beginning of the year:	
a Contributions allocated toward unpaid minimum required contributions from prior years.....	19a 0
b Contributions made to avoid restrictions adjusted to valuation date	19b 0
c Contributions allocated toward minimum required contribution for current year adjusted to valuation date.....	19c 643,092
20 Quarterly contributions and liquidity shortfalls:	
a Did the plan have a "funding shortfall" for the prior year?..... ☒ Yes ☐ No	
b If line 20a is "Yes," were required quarterly installments for the current year made in a timely manner?	
☐ Yes ☒ No	
c If line 20a is "Yes," see instructions and complete the following table as applicable:	
Liquidity shortfall as of end of quarter of this plan year	
(1) 1st	(2) 2nd
0	0
(3) 3rd	(4) 4th
0	0

Part V Assumptions Used to Determine Funding Target and Target Normal Cost

21 Discount rate:				
a Segment rates:	1st segment: 4.16 %	2nd segment: 5.72 %	3rd segment: 6.48 %	☐ N/A, full yield curve used
b Applicable month (enter code)				21b 4
22 Weighted average retirement age				22 65
23 Mortality table(s) (see instructions)	☐ Prescribed - combined ☒ Prescribed - separate ☐ Substitute			

Part VI Miscellaneous Items

24 Has a change been made in the non-prescribed actuarial assumptions for the current plan year? If "Yes," see instructions regarding required attachment.	☒ Yes ☐ No
25 Has a method change been made for the current plan year? If "Yes," see instructions regarding required attachment.	☐ Yes ☒ No
26 Is the plan required to provide a Schedule of Active Participants? If "Yes," see instructions regarding required attachment.	☒ Yes ☐ No
27 If the plan is subject to alternative funding rules, enter applicable code and see instructions regarding attachment	27

Part VII Reconciliation of Unpaid Minimum Required Contributions For Prior Years

28 Unpaid minimum required contributions for all prior years	28	0
29 Discounted employer contributions allocated toward unpaid minimum required contributions from prior years (line 19a)	29	0
30 Remaining amount of unpaid minimum required contributions (line 28 minus line 29)	30	0

Part VIII Minimum Required Contribution For Current Year

31 Target normal cost and excess assets (see instructions):			
a Target normal cost (line 6)	31a	568,860	
b Excess assets, if applicable, but not greater than line 31a	31b	0	
32 Amortization installments:			
a Net shortfall amortization installment	Outstanding Balance	Installment	
b Waiver amortization installment	1,055,932	226,236	
	0	0	
33 If a waiver has been approved for this plan year, enter the date of the ruling letter granting the approval (Month _____ Day _____ Year _____) and the waived amount	33		
34 Total funding requirement before reflecting carryover/prefunding balances (lines 31a - 31b + 32a + 32b - 33)	34	795,096	
	Carryover balance	Prefunding balance	Total balance
35 Balances elected for use to offset funding requirement	0	795,096	795,096
36 Additional cash requirement (line 34 minus line 35)	36	0	
37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c)	37	643,092	
38 Present value of excess contributions for current year (see instructions)			
a Total (excess, if any, of line 37 over line 36)	38a	643,092	
b Portion included in line 38a attributable to use of prefunding and funding standard carryover balances	38b	643,092	
39 Unpaid minimum required contribution for current year (excess, if any, of line 36 over line 37)	39	0	
40 Unpaid minimum required contributions for all years	40	0	

Part IX Pension Funding Relief Under Pension Relief Act of 2010 (See Instructions)

41 If an election was made to use PRA 2010 funding relief for this plan:			
a Schedule elected	☐ 2 plus 7 years ☐ 15 years		
b Eligible plan year(s) for which the election in line 41a was made	☐ 2008 ☐ 2009 ☐ 2010 ☐ 2011		
42 Amount of acceleration adjustment	42		
43 Excess installment acceleration amount to be carried over to future plan years	43		

Schedule SB, Line 8 – Late Election to Apply Balances to Quarterly Installments

The balances used to offset funding requirement reported on line 35 of the 2016 Schedule SB was \$814,349 of prefunding balance. The portion used to offset prior year's funding requirement reported on line 8a of the 2017 Schedule SB is \$814,822. The discrepancy is a result of the sponsor making a late election to apply carryover balance to quarterly funding requirements. The amount shown on line 8a of the 2017 Schedule SB reflects an interest penalty of \$473 for the late election.

Schedule SB, Part V — Statement of Actuarial Assumption/Methods

ACTUARIAL ASSUMPTIONS FOR JANUARY 1, 2017 FUNDING VALUATION

DISCOUNT RATE SPONSOR ELECTIONS			
------------------------------------	--	--	--

- Segment rates or full yield curve Segment
- Look-back months 4
- Use stabilized rates – funding Yes
- Use stabilized rates – Section 436 benefit restrictions Yes

	<u>Stabilized rates</u> (BBA'17)	<u>Nonstabilized rates</u>
• First 5 years	4.16%	1.52%
• Next 15 years	5.72%	3.80%
• Over 20 years	6.48%	4.79%

Rationale: Prescribed assumption by the IRS and the PBGC

*Schedule SB, Part V — Statement of Actuarial Assumption/Methods***MORTALITY SPONSOR
ELECTIONS**

Section 430(h)(3) prescribed separate static annuitant and nonannuitant mortality tables. These tables are based on the RP-2000 mortality tables projected with mortality improvement to the valuation year plus 7 and 15 years based on Scale AA.

Rationale: Prescribed assumption by the IRS

OTHER ECONOMIC ASSUMPTIONS

- Expected investment return 3.65% for year 2015, 4.28% for year 2016 and 4.11% for year 2017.

Rationale: Based on the expected yield of a dedicated high quality bond portfolio constructed to match the qualified pension plan's projected benefit payments.

- Expenses

\$151,000 added to current year normal cost.

Rationale: Prior year's actual administrative expense adjusted for expected changes in PBGC premiums.

DEMOGRAPHIC ASSUMPTIONS

- Withdrawal

Sum of (a) and (b)

a) Three times the rates in the Massachusetts Mutual A. Table for Males.

b) Two times Hunter's Rates for males and four times Hunter's Rates for females.

See table of sample rates.

- Disability incidence

None.

- Retirement age

Age 65. (Individuals employed at the Kansas City location who had attained age 50 and earned five years of credited service as of October 1, 1996 are assumed to retire at age 62.)

- Benefit commencement age for

– Future vested deferred 65

– Current vested deferred 65

- Spouse assumptions

MALE PARTICIPANTS

FEMALE PARTICIPANTS

Schedule SB, Part V — Statement of Actuarial Assumption/Methods

– Percentage married	75%	75%	
– Spouse age difference	2 years younger	2 years older	
FORM OF PAYMENT	<u>SINGLE LIFE</u>	<u>50% J&S</u>	<u>100% J&S</u>
• Active retirements	50%	25%	25%
• Future vested deferred	50%	25%	25%
• Future deaths	100%	0%	0%
• Current vested deferred	50%	25%	25%
UNPREDICTABLE CONTINGENT EVENT ASSUMPTIONS	N/A		

Table of Sample Rates

ATTAINED AGE	WITHDRAWAL	
	MALE	FEMALE
20	22.3%	22.4%
25	16.3%	16.4%
30	10.3%	10.4%
35	7.2%	7.3%
40	4.1%	4.2%
45	2.2%	2.4%
50	0.3%	0.7%
55	0.6%	1.1%

Schedule SB, Part V — Statement of Actuarial Assumption/Methods

60	1.1%	2.2%
----	------	------

Rationale for demographic and form of payment assumptions: The plan sponsor believes these assumptions to be reasonable and representative of current and future expected experience. The plan's signing actuary monitors experience annually and has not detected any significant gains or losses.

ACTUARIAL METHODS FOR FUNDING**Asset Methods – effective January 1, 2009**

The asset valuation method is an average of the adjusted market value for each year during the last two years preceding the valuation date. The adjusted market value is the market value at each determination date adjusted to the valuation date based on actual cash flows and expected interest at the lesser of the expected rate of return and the third segment rate. This amount is adjusted to be no greater than 110 percent and no less than 90 percent of the fair market value, as defined in IRC Section 430.

A characteristic of this asset method is that, over time, it is slightly more likely to produce an actuarial value of assets that is less than the market value of assets than an actuarial value that is greater than the market value.

Participant Methods – Effective January 1, 2008

Participants or former participants are included or excluded from the valuation as described below:

- **Participants included:** The plan sponsor and Willis Towers Watson provided us with participant data as of the valuation date.
- **Participants excluded:** No actuarial liability is included for non-vested participants who terminated prior to the valuation date. For this purpose, participants with a break in service on the valuation date are treated as terminated participants.
- **Insurance contracts:** The plan does not have any insurance contracts.

*Schedule SB, Part V — Statement of Actuarial Assumption/Methods***Minimum Funding Methods – Effective January 1, 2008**

The funding target for minimum funding calculations is computed using the traditional unit credit method of funding. The objective under this method is to fund each participant's benefits under the plan as they accrue. Thus, the total pension to which each participant is expected to become entitled at retirement is broken down into units, each associated with a year of past or future credited service.

A detailed description of the calculation follows:

- The plan's valuation date is the beginning of the plan year.
- An individual's **funding target** is the present value of future benefits based on credited service and average pay as of the beginning of the plan year, and an individual's **target normal cost** is the present value of the benefit expected to accrue in the plan year. If multiple decrements are used, the funding target and the target normal cost for an individual is the sum of the component funding targets and target normal costs associated with the various anticipated separation dates.
- The plan's **target normal cost** is the sum of the individual target normal costs, and the plan's **funding target** is the sum of the individual funding targets for all participants under the plan.

*Schedule SB, Part V — Summary of Plan Provisions***SUMMARY OF MAJOR PLAN PROVISIONS**

Effective date and plan year	Restated plan: January 1, 2009 Plan year: Calendar year
Status of the plan	The plan has ongoing benefit accruals and, except for Kansas City USWA, new employees are eligible to participate in the plan once they satisfy the participation requirements.
Significant events that occurred during the year	Benefits for Aurora IAM participants were updated due to negotiation.

DEFINITIONS

- **Employees Covered** All hourly employees of the Pentair Pump Group, Inc. employed in an hourly rate position, and represented by a union. Kansas City USWA employees hired after January 1, 2015 are not eligible for the plan. F.E. Meyers (Ashland) GMP employees hired after 4/5/2011 are not eligible for the plan. Aurora IAM employees hired after 1/1/2018 will not participate in the plan.
- **Participation** All covered employees participate upon completing one year of service and attaining age 21.
- **Vesting service** Full and fractional years of service. Any fractional remainder of days less than 30 shall be treated as one month.
- **Credited service** Full and fractional years of service, with service earned for any month in which one or more days are worked. Employees of the former General Signal locations begin earning credited service on the later of their hire date or August 23, 1997.

*Schedule SB, Part V — Summary of Plan Provisions***NORMAL RETIREMENT**

- Eligibility Later of age 65 and five years of participation.

- Benefit Amount equal to product of (a) and (b):

(a) Number of years of credited service (limited to 37 years for Molders).

(b) The benefit rate shown below:

Effective Date	Machinists	Molders	Ashland	Kansas City	Aurora
1/01/88	\$ 12.00	\$ 10.25			
4/04/88	12.00	10.50			
4/03/89	12.50	10.75			
9/01/89	12.50	10.75			
4/02/90	13.00	11.00			
9/01/90	13.00	11.00			
4/01/91	13.50	11.00			
5/01/92	14.00	11.00			
4/01/97	14.00	11.00			
8/23/97	14.00	11.00	\$17.00	\$19.50	\$20.00
10/1/01	14.00	11.00	17.00	20.50	20.00
6/23/02	14.00	11.00	17.00	20.50	21.00
10/1/02	14.00	11.00	18.00	20.50	21.00
10/1/03		11.00	18.50	21.00	21.00
6/21/04			18.50	21.00	21.50
1/01/05			15.50	21.00	21.50
10/1/06				22.00	21.50
6/25/07					22.00
6/22/09					22.50
6/21/11					23.00
6/25/12					24.00
6/23/14					25.00
6/22/15					25.50
6/20/16					26.00
6/25/17					27.25
6/23/18					28.25
6/22/19					29.50
6/20/20					30.50
6/20/21					31.75

*Schedule SB, Part V — Summary of Plan Provisions***NORMAL RETIREMENT**
(CONTINUED)

The Ashland (Hydromatic) plant closed December 31, 2004. Any active employee as of January 1, 2005 has an accrued benefit based on \$18.50 per year of service, and will receive F.E. Myers IAM benefit rates for future service as they are now F.E. Myers IAM employees. F.E. Myers IAM employees have a benefit equal to their credited service through 4/6/2003 times \$14.00 plus credited service from 4/7/2003 to 4/4/2004 times \$15.00 plus credited service from 4/5/2004 to 4/6/2008 times \$15.50 plus credited service from 4/7/2008 to 4/6/2009 times \$16.00 plus credited service from 4/7/2009 to 4/6/2010 times \$16.50 plus credited service from 4/7/2010 to 4/6/2011 times \$17.00 plus credited service from 4/7/2011 to 4/6/2012 times \$17.50 plus credited service from 4/7/2012 to 4/6/2013 times \$18.00 plus credited service from 4/7/2013 to 4/6/2015 times \$19.00 plus credited service from 4/7/2015 to 4/6/2017 times \$20.00 plus credited service from 4/7/2017 times \$21.00.

F.E. Myers GMP employees have a benefit equal to their credited service through 4/3/2004 times \$11.00 plus credited service from 4/4/2004 to 4/2/2006 times \$12.00 plus credited service from 4/3/2006 to 3/31/2016 times \$12.50 plus credited service after 4/1/2016 times \$13.00.

Kansas City (Fairbanks Morse) employees have a benefit equal to their credited service through 10/1/2009 times \$22.00 plus credited service from 10/1/2009 to 10/1/2014 times \$23.50 plus credited service from 10/1/2014 times \$25.00.

*Schedule SB, Part V — Summary of Plan Provisions***EARLY RETIREMENT**

• Eligibility

Eligible on or after age 55 and 15 years of vesting service.

• Benefit

Amount equal to the normal retirement benefit, based on service at termination reduced by 0.6% for each month commencement precedes normal retirement. Kansas City employees who had attained age 50 and had five years of service as of October 1, 1996 have benefits reduced for early retirement based on the following table:

<u>Retirement Age</u>	<u>Reduction Factor</u>
64	3%
63	5
62	9
61	13
60	17
59	30
58	35
57	40
56	45
55	50

LATE RETIREMENT

• Eligibility

Eligible after the normal retirement date.

• Benefit

Greater of the normal retirement benefit actuarially increased to the earlier of the date the suspension of benefits notice was given and the date of termination, and the benefit at date of termination.

*Schedule SB, Part V — Summary of Plan Provisions***DEFERRED VESTED**

- Eligibility Eligible on or after five years of vesting service.
- Benefit Amount equal to the normal retirement benefit using the credited service and dollar amounts at date of termination, with payments commencing at age 65. May commence as early as age 55 if 15 years of vesting service, with a reduction for early retirement (as shown above).

DISABILITY

- Eligibility Eligible on or after age 40 and 15 years of vesting service.
- Benefit Amount equal to the normal retirement benefit accrued to date of disability, commencing immediately, offset by other disability benefits payable to the participant.

PRE-RETIREMENT DEATH

- Eligibility Eligible on or after five years of vesting service.
- Benefit Amount equal to 50% of the benefit the participant would have received had he retired under a 50% joint and survivor annuity on the first of the month following his death, or his earliest commencement age, if not yet eligible.

FORM OF BENEFITS

- Automatic form for unmarried participants Life annuity.
- Automatic form for married participants 50% Joint & Survivor.
- Optional forms Life annuity, 50% Joint & Survivor, 66 2/3% Joint & Survivor, 75% Joint & Survivor, 100% Joint & Survivor.

**OPTIONAL FORM OF
CONVERSION FACTORS**

UP84 mortality and 7% interest.

MISCELLANEOUS

- Maximum benefits Annual benefits may not exceed the limits in IRC Section 415. This limit is indexed annually. For 2017, the limit is \$215,000.

*Schedule SB, Part V — Summary of Plan Provisions***Benefits Included or Excluded**

Unless noted below, all benefits provided by the plan are included in this valuation.

- **Plan amendments excluded:** None.
- **Late retirement increases:**
 - *Active participants:* The plan provides benefit suspension notices to participants who work beyond normal retirement; therefore, late retirement actuarial increases only apply to participants who defer retirement beyond age 70½.
 - *Deferred vested participants:* Current deferred vested participants over normal retirement age are valued including the late retirement actuarial increase.
- **Internal Revenue Code limitations:** The limitations of Internal Revenue Code Section 415(b) and 401(a)(17) have been incorporated into our calculations.
- **IRC Section 416 rules for top-heavy plans:** We did not test whether this plan is top-heavy (when the present value of benefits for key employees equals or exceeds 60% of the present value for all participants). However, we expect that the plan is not top-heavy due to the large number of rank-and-file participants; therefore, the funding target and target normal cost do not reflect any liability for top-heavy benefit accruals.

Schedule SB, Part V — Summary of Plan Provisions

PLAN PROVISIONS SPECIFIC TO FUNDING

Additional Benefits Included or Excluded• **IRC Section 436 benefit restrictions:**

- *Unpredictable contingent event benefits:* See below.
- *Plan amendments:* See above.
- *Prohibited payments:* Limitations on prohibited benefits (if any) are reflected for annuity starting dates before the valuation date but are ignored for annuity starting dates on or after the valuation date.
- *Benefit accruals:* The plan's funding target does not reflect any limitation on benefit accruals. The target normal cost does not reflect any limitation on benefit accruals.

- **Scheduled benefit increases:** Scheduled benefit increases effective after the end of the current plan year are excluded from minimum funding requirements.
- **Unpredictable contingent event benefits:** The plan does not have any unpredictable contingent event benefits.

PLAN PROVISION CHANGES SINCE PRIOR VALUATION

- IRC 415(b) maximum benefit was updated from 2016 to 2017.

Schedule SB, line 24 — Change in Actuarial Assumptions

ACTUARIAL ASSUMPTION CHANGES SINCE PRIOR VALUATION

Funding

- The expected investment return on assets was changed from 4.28% to 4.11%.
- The administrative expense load was changed from \$145,000 to \$151,000.

Schedule SB, line 26 — Schedule of Active Participant Data

ATTAINED AGE	YEARS OF CREDITED SERVICE										TOTAL
	UNDER 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & UP	
Under 25		4									4
25-29		4	7								11
30-34		6	9	3							18
35-39		5	9	5	5	2					26
40-44		1	10	2	7	6	1				27
45-49		3	8	6	10	11	9				47
50-54		5	12	6	15	3	4	1	1		47
55-59		4	8	5	33	2	3		13		68
60-64		1	7	5	29		2		14	7	65
65-69			1		8						9
70 & up			1		2						3
Total		33	72	32	109	24	19	1	28	7	325

In each cell, the number is the count of active participants for each age/service combination.

Schedule SB, line 32 — Schedule of Amortization Bases

The total shortfall amortization charge is the sum of the individual shortfall amortization installment for each plan year since the IRC Section 430 changes made by the Pension Protection Act of 2006 (PPA) took effect for the plan. Although an individual shortfall amortization installment can be negative, the combined shortfall amortization charge cannot be less than \$0.

SHORTFALL BASES					
YEAR ESTABLISHED		OUTSTANDING BALANCE	YEARS REMAINING		2017 INSTALLMENT
2015	\$	873,251	5	\$	189,169
2016	\$	322,929	6		60,097
2017		(140,248)	7		(23,030)
Total	\$	1,055,932		\$	226,236

SCHEDULE SB (Form 5500) <small>Department of the Treasury Internal Revenue Service</small> <small>Department of Labor Employee Benefits Security Administration</small> <small>Pension Benefit Guaranty Corporation</small>	Single-Employer Defined Benefit Plan Actuarial Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6059 of the Internal Revenue Code (the Code). ► File as an attachment to Form 5500 or 5500-SF.	OMB No. 1210-0110 2017 This Form is Open to Public Inspection
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For calendar plan year 2017 or fiscal plan year beginning <u>01/01/2017</u> and ending <u>12/31/2017</u>			
► Round off amounts to nearest dollar.			
► Caution: A penalty of \$1,000 will be assessed for late filing of this report unless reasonable cause is established.			
A Name of plan PENTAIR PUMP GROUP, INC. BARGAINING UNIT EMPLOYEES PENSION PLAN	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:60%;">B Three-digit plan number (PN) ►</td> <td style="width:40%; text-align: center;">002</td> </tr> </table>	B Three-digit plan number (PN) ►	002
B Three-digit plan number (PN) ►	002		
C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF PENTAIR FLOW TECHNOLOGIES, LLC	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>D Employer Identification Number (EIN) 41-1881858</td> </tr> </table>	D Employer Identification Number (EIN) 41-1881858	
D Employer Identification Number (EIN) 41-1881858			
E Type of plan: ☒ Single ☐ Multiple-A ☐ Multiple-B F Prior year plan size: ☐ 100 or fewer ☐ 101-500 ☒ More than 500			

Part I Basic Information			
1 Enter the valuation date: Month <u>01</u> Day <u>01</u> Year <u>2017</u>			
2 Assets:			
a Market value.....	2a	17,549,803	
b Actuarial value.....	2b	17,454,937	
3 Funding target/participant count breakdown	(1) Number of participants	(2) Vested Funding Target	(3) Total Funding Target
a For retired participants and beneficiaries receiving payment	78	3,527,339	3,527,339
b For terminated vested participants	146	2,223,724	2,223,724
c For active participants	325	7,748,332	7,828,430
d Total.....	549	13,499,395	13,579,493
4 If the plan is in at-risk status, check the box and complete lines (a) and (b) ☐			
a Funding target disregarding prescribed at-risk assumptions.....	4a		
b Funding target reflecting at-risk assumptions, but disregarding transition rule for plans that have been in at-risk status for fewer than five consecutive years and disregarding loading factor.....	4b		
5 Effective interest rate.....	5	6.03%	
6 Target normal cost	6	568,860	

Statement by Enrolled Actuary
 To the best of my knowledge, the information supplied in this schedule and accompanying schedules, statements and attachments, if any, is complete and accurate. Each prescribed assumption was applied in accordance with applicable law and regulations. In my opinion, each other assumption is reasonable (taking into account the experience of the plan and reasonable expectations) and such other assumptions, in combination, offer my best estimate of anticipated experience under the plan.

SIGN HERE		<u>9/25/2018</u>
	Signature of actuary	Date
	GREGORY T. TRAPP, ASA, EA, MAAA	1705207
	Type or print name of actuary	Most recent enrollment number
	MERCER	612-642-8600
	Firm name	Telephone number (including area code)
	333 SOUTH 7TH STREET, SUITE 1400	
	MINNEAPOLIS MN 55402-2427	
	Address of the firm	

If the actuary has not fully reflected any regulation or ruling promulgated under the statute in completing this schedule, check the box and see instructions ☐

For Paperwork Reduction Act Notice, see the Instructions for Form 5500 or 5500-SF. **Schedule SB (Form 5500) 2017**

Part II Beginning of Year Carryover and Prefunding Balances

	(a) Carryover balance	(b) Prefunding balance
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8 Portion elected for use to offset prior year's funding requirement (line 35 from prior year)	0	814,822
9 Amount remaining (line 7 minus line 8).....	0	4,547,562
10 Interest on line 9 using prior year's actual return of <u>8.44%</u>	0	383,814
11 Prior year's excess contributions to be added to prefunding balance:		
a Present value of excess contributions (line 38a from prior year)		0
b(1) Interest on the excess, if any, of line 38a over line 38b from prior year Schedule SB, using prior year's effective interest rate of <u>6.23%</u>		0
b(2) Interest on line 38b from prior year Schedule SB, using prior year's actual return		0
c Total available at beginning of current plan year to add to prefunding balance.....		0
d Portion of (c) to be added to prefunding balance.....		0
12 Other reductions in balances due to elections or deemed elections		
13 Balance at beginning of current year (line 9 + line 10 + line 11d – line 12)	0	4,931,376

Part III Funding Percentages

14 Funding target attainment percentage	14	92.22%
15 Adjusted funding target attainment percentage.....	15	128.53%
16 Prior year's funding percentage for purposes of determining whether carryover/prefunding balances may be used to reduce current year's funding requirement	16	88.94%
17 If the current value of the assets of the plan is less than 70 percent of the funding target, enter such percentage.	17	%

Part IV Contributions and Liquidity Shortfalls

18 Contributions made to the plan for the plan year by employer(s) and employees:					
(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees	(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees
09/10/2018	710,000	0			
Totals ▶			18(b)	710,000	18(c) 0

19 Discounted employer contributions – see instructions for small plan with a valuation date after the beginning of the year:			
a Contributions allocated toward unpaid minimum required contributions from prior years.....	19a		0
b Contributions made to avoid restrictions adjusted to valuation date	19b		0
c Contributions allocated toward minimum required contribution for current year adjusted to valuation date.....	19c		643,092
20 Quarterly contributions and liquidity shortfalls:			
a Did the plan have a “funding shortfall” for the prior year?.....			☒ Yes ☐ No
b If line 20a is “Yes,” were required quarterly installments for the current year made in a timely manner?			☐ Yes ☒ No
c If line 20a is “Yes,” see instructions and complete the following table as applicable:			
Liquidity shortfall as of end of quarter of this plan year			
(1) 1st	(2) 2nd	(3) 3rd	(4) 4th
0	0	0	0

Part V Assumptions Used to Determine Funding Target and Target Normal Cost

21 Discount rate:				
a Segment rates:	1st segment: 4.16 %	2nd segment: 5.72 %	3rd segment: 6.48 %	☐ N/A, full yield curve used
b Applicable month (enter code).....				21b 4
22 Weighted average retirement age				22 65
23 Mortality table(s) (see instructions)	☐ Prescribed - combined	☒ Prescribed - separate	☐ Substitute	

Part VI Miscellaneous Items

24 Has a change been made in the non-prescribed actuarial assumptions for the current plan year? If "Yes," see instructions regarding required attachment.	☒ Yes ☐ No
25 Has a method change been made for the current plan year? If "Yes," see instructions regarding required attachment.	☐ Yes ☒ No
26 Is the plan required to provide a Schedule of Active Participants? If "Yes," see instructions regarding required attachment.	☒ Yes ☐ No
27 If the plan is subject to alternative funding rules, enter applicable code and see instructions regarding attachment	27

Part VII Reconciliation of Unpaid Minimum Required Contributions For Prior Years

28 Unpaid minimum required contributions for all prior years	28	0
29 Discounted employer contributions allocated toward unpaid minimum required contributions from prior years (line 19a)	29	0
30 Remaining amount of unpaid minimum required contributions (line 28 minus line 29)	30	0

Part VIII Minimum Required Contribution For Current Year

31 Target normal cost and excess assets (see instructions):			
a Target normal cost (line 6)	31a	568,860	
b Excess assets, if applicable, but not greater than line 31a	31b	0	
32 Amortization installments:	Outstanding Balance	Installment	
a Net shortfall amortization installment.....	1,055,932	226,236	
b Waiver amortization installment	0	0	
33 If a waiver has been approved for this plan year, enter the date of the ruling letter granting the approval (Month _____ Day _____ Year _____) and the waived amount	33		
34 Total funding requirement before reflecting carryover/prefunding balances (lines 31a - 31b + 32a + 32b - 33)....	34	795,096	
	Carryover balance	Prefunding balance	Total balance
35 Balances elected for use to offset funding requirement.....	0	795,096	795,096
36 Additional cash requirement (line 34 minus line 35).....	36	0	
37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c).....	37	643,092	
38 Present value of excess contributions for current year (see instructions)			
a Total (excess, if any, of line 37 over line 36)	38a	643,092	
b Portion included in line 38a attributable to use of prefunding and funding standard carryover balances	38b	643,092	
39 Unpaid minimum required contribution for current year (excess, if any, of line 36 over line 37).....	39	0	
40 Unpaid minimum required contributions for all years	40	0	

Part IX Pension Funding Relief Under Pension Relief Act of 2010 (See Instructions)

41 If an election was made to use PRA 2010 funding relief for this plan:			
a Schedule elected	☐ 2 plus 7 years	☐ 15 years	
b Eligible plan year(s) for which the election in line 41a was made	☐ 2008	☐ 2009	☐ 2010 ☐ 2011
42 Amount of acceleration adjustment	42		
43 Excess installment acceleration amount to be carried over to future plan years	43		

Schedule SB, Line 8 – Late Election to Apply Balances to Quarterly Installments

The balances used to offset funding requirement reported on line 35 of the 2016 Schedule SB was \$814,349 of prefunding balance. The portion used to offset prior year's funding requirement reported on line 8a of the 2017 Schedule SB is \$814,822. The discrepancy is a result of the sponsor making a late election to apply carryover balance to quarterly funding requirements. The amount shown on line 8a of the 2017 Schedule SB reflects an interest penalty of \$473 for the late election.

Schedule SB, Part V — Statement of Actuarial Assumption/Methods

ACTUARIAL ASSUMPTIONS FOR JANUARY 1, 2017 FUNDING VALUATION

DISCOUNT RATE SPONSOR ELECTIONS			
------------------------------------	--	--	--

- Segment rates or full yield curve Segment
- Look-back months 4
- Use stabilized rates – funding Yes
- Use stabilized rates – Section 436 benefit restrictions Yes

	<u>Stabilized rates</u> (BBA'17)	<u>Nonstabilized rates</u>
• First 5 years	4.16%	1.52%
• Next 15 years	5.72%	3.80%
• Over 20 years	6.48%	4.79%

Rationale: Prescribed assumption by the IRS and the PBGC

*Schedule SB, Part V — Statement of Actuarial Assumption/Methods***MORTALITY SPONSOR
ELECTIONS**

Section 430(h)(3) prescribed separate static annuitant and nonannuitant mortality tables. These tables are based on the RP-2000 mortality tables projected with mortality improvement to the valuation year plus 7 and 15 years based on Scale AA.

Rationale: Prescribed assumption by the IRS

OTHER ECONOMIC ASSUMPTIONS

- Expected investment return 3.65% for year 2015, 4.28% for year 2016 and 4.11% for year 2017.
Rationale: Based on the expected yield of a dedicated high quality bond portfolio constructed to match the qualified pension plan's projected benefit payments.
- Expenses \$151,000 added to current year normal cost.
Rationale: Prior year's actual administrative expense adjusted for expected changes in PBGC premiums.

DEMOGRAPHIC ASSUMPTIONS

- Withdrawal Sum of (a) and (b)
 - a) Three times the rates in the Massachusetts Mutual A. Table for Males.
 - b) Two times Hunter's Rates for males and four times Hunter's Rates for females.

See table of sample rates.
- Disability incidence **None.**
- Retirement age Age 65. (Individuals employed at the Kansas City location who had attained age 50 and earned five years of credited service as of October 1, 1996 are assumed to retire at age 62.)
- Benefit commencement age for
 - Future vested deferred 65
 - Current vested deferred 65
- Spouse assumptions **MALE PARTICIPANTS** **FEMALE PARTICIPANTS**

Schedule SB, Part V — Statement of Actuarial Assumption/Methods

– Percentage married	75%	75%	
– Spouse age difference	2 years younger	2 years older	
FORM OF PAYMENT	<u>SINGLE LIFE</u>	<u>50% J&S</u>	<u>100% J&S</u>
• Active retirements	50%	25%	25%
• Future vested deferred	50%	25%	25%
• Future deaths	100%	0%	0%
• Current vested deferred	50%	25%	25%
UNPREDICTABLE CONTINGENT EVENT ASSUMPTIONS	N/A		

Table of Sample Rates

ATTAINED AGE	WITHDRAWAL	
	MALE	FEMALE
20	22.3%	22.4%
25	16.3%	16.4%
30	10.3%	10.4%
35	7.2%	7.3%
40	4.1%	4.2%
45	2.2%	2.4%
50	0.3%	0.7%
55	0.6%	1.1%

Schedule SB, Part V — Statement of Actuarial Assumption/Methods

60	1.1%	2.2%
----	------	------

Rationale for demographic and form of payment assumptions: The plan sponsor believes these assumptions to be reasonable and representative of current and future expected experience. The plan's signing actuary monitors experience annually and has not detected any significant gains or losses.

ACTUARIAL METHODS FOR FUNDING**Asset Methods – effective January 1, 2009**

The asset valuation method is an average of the adjusted market value for each year during the last two years preceding the valuation date. The adjusted market value is the market value at each determination date adjusted to the valuation date based on actual cash flows and expected interest at the lesser of the expected rate of return and the third segment rate. This amount is adjusted to be no greater than 110 percent and no less than 90 percent of the fair market value, as defined in IRC Section 430.

A characteristic of this asset method is that, over time, it is slightly more likely to produce an actuarial value of assets that is less than the market value of assets than an actuarial value that is greater than the market value.

Participant Methods – Effective January 1, 2008

Participants or former participants are included or excluded from the valuation as described below:

- **Participants included:** The plan sponsor and Willis Towers Watson provided us with participant data as of the valuation date.
- **Participants excluded:** No actuarial liability is included for non-vested participants who terminated prior to the valuation date. For this purpose, participants with a break in service on the valuation date are treated as terminated participants.
- **Insurance contracts:** The plan does not have any insurance contracts.

*Schedule SB, Part V — Statement of Actuarial Assumption/Methods***Minimum Funding Methods – Effective January 1, 2008**

The funding target for minimum funding calculations is computed using the traditional unit credit method of funding. The objective under this method is to fund each participant's benefits under the plan as they accrue. Thus, the total pension to which each participant is expected to become entitled at retirement is broken down into units, each associated with a year of past or future credited service.

A detailed description of the calculation follows:

- The plan's valuation date is the beginning of the plan year.
- An individual's **funding target** is the present value of future benefits based on credited service and average pay as of the beginning of the plan year, and an individual's **target normal cost** is the present value of the benefit expected to accrue in the plan year. If multiple decrements are used, the funding target and the target normal cost for an individual is the sum of the component funding targets and target normal costs associated with the various anticipated separation dates.
- The plan's **target normal cost** is the sum of the individual target normal costs, and the plan's **funding target** is the sum of the individual funding targets for all participants under the plan.

*Schedule SB, Part V — Summary of Plan Provisions***SUMMARY OF MAJOR PLAN PROVISIONS**

Effective date and plan year	Restated plan: January 1, 2009 Plan year: Calendar year
Status of the plan	The plan has ongoing benefit accruals and, except for Kansas City USWA, new employees are eligible to participate in the plan once they satisfy the participation requirements.
Significant events that occurred during the year	Benefits for Aurora IAM participants were updated due to negotiation.

DEFINITIONS

- **Employees Covered** All hourly employees of the Pentair Pump Group, Inc. employed in an hourly rate position, and represented by a union. Kansas City USWA employees hired after January 1, 2015 are not eligible for the plan. F.E. Meyers (Ashland) GMP employees hired after 4/5/2011 are not eligible for the plan. Aurora IAM employees hired after 1/1/2018 will not participate in the plan.
- **Participation** All covered employees participate upon completing one year of service and attaining age 21.
- **Vesting service** Full and fractional years of service. Any fractional remainder of days less than 30 shall be treated as one month.
- **Credited service** Full and fractional years of service, with service earned for any month in which one or more days are worked. Employees of the former General Signal locations begin earning credited service on the later of their hire date or August 23, 1997.

*Schedule SB, Part V — Summary of Plan Provisions***NORMAL RETIREMENT**

- Eligibility Later of age 65 and five years of participation.

- Benefit Amount equal to product of (a) and (b):

(a) Number of years of credited service (limited to 37 years for Molders).

(b) The benefit rate shown below:

Effective Date	Machinists	Molders	Ashland	Kansas City	Aurora
1/01/88	\$ 12.00	\$ 10.25			
4/04/88	12.00	10.50			
4/03/89	12.50	10.75			
9/01/89	12.50	10.75			
4/02/90	13.00	11.00			
9/01/90	13.00	11.00			
4/01/91	13.50	11.00			
5/01/92	14.00	11.00			
4/01/97	14.00	11.00			
8/23/97	14.00	11.00	\$17.00	\$19.50	\$20.00
10/1/01	14.00	11.00	17.00	20.50	20.00
6/23/02	14.00	11.00	17.00	20.50	21.00
10/1/02	14.00	11.00	18.00	20.50	21.00
10/1/03		11.00	18.50	21.00	21.00
6/21/04			18.50	21.00	21.50
1/01/05			15.50	21.00	21.50
10/1/06				22.00	21.50
6/25/07					22.00
6/22/09					22.50
6/21/11					23.00
6/25/12					24.00
6/23/14					25.00
6/22/15					25.50
6/20/16					26.00
6/25/17					27.25
6/23/18					28.25
6/22/19					29.50
6/20/20					30.50
6/20/21					31.75

*Schedule SB, Part V — Summary of Plan Provisions***NORMAL RETIREMENT**
(CONTINUED)

The Ashland (Hydromatic) plant closed December 31, 2004. Any active employee as of January 1, 2005 has an accrued benefit based on \$18.50 per year of service, and will receive F.E. Myers IAM benefit rates for future service as they are now F.E. Myers IAM employees. F.E. Myers IAM employees have a benefit equal to their credited service through 4/6/2003 times \$14.00 plus credited service from 4/7/2003 to 4/4/2004 times \$15.00 plus credited service from 4/5/2004 to 4/6/2008 times \$15.50 plus credited service from 4/7/2008 to 4/6/2009 times \$16.00 plus credited service from 4/7/2009 to 4/6/2010 times \$16.50 plus credited service from 4/7/2010 to 4/6/2011 times \$17.00 plus credited service from 4/7/2011 to 4/6/2012 times \$17.50 plus credited service from 4/7/2012 to 4/6/2013 times \$18.00 plus credited service from 4/7/2013 to 4/6/2015 times \$19.00 plus credited service from 4/7/2015 to 4/6/2017 times \$20.00 plus credited service from 4/7/2017 times \$21.00.

F.E. Myers GMP employees have a benefit equal to their credited service through 4/3/2004 times \$11.00 plus credited service from 4/4/2004 to 4/2/2006 times \$12.00 plus credited service from 4/3/2006 to 3/31/2016 times \$12.50 plus credited service after 4/1/2016 times \$13.00.

Kansas City (Fairbanks Morse) employees have a benefit equal to their credited service through 10/1/2009 times \$22.00 plus credited service from 10/1/2009 to 10/1/2014 times \$23.50 plus credited service from 10/1/2014 times \$25.00.

*Schedule SB, Part V — Summary of Plan Provisions***EARLY RETIREMENT**

- **Eligibility** Eligible on or after age 55 and 15 years of vesting service.
- **Benefit** Amount equal to the normal retirement benefit, based on service at termination reduced by 0.6% for each month commencement precedes normal retirement. Kansas City employees who had attained age 50 and had five years of service as of October 1, 1996 have benefits reduced for early retirement based on the following table:

<u>Retirement Age</u>	<u>Reduction Factor</u>
64	3%
63	5
62	9
61	13
60	17
59	30
58	35
57	40
56	45
55	50

LATE RETIREMENT

- **Eligibility** Eligible after the normal retirement date.
- **Benefit** Greater of the normal retirement benefit actuarially increased to the earlier of the date the suspension of benefits notice was given and the date of termination, and the benefit at date of termination.

*Schedule SB, Part V — Summary of Plan Provisions***DEFERRED VESTED**

- Eligibility Eligible on or after five years of vesting service.
- Benefit Amount equal to the normal retirement benefit using the credited service and dollar amounts at date of termination, with payments commencing at age 65. May commence as early as age 55 if 15 years of vesting service, with a reduction for early retirement (as shown above).

DISABILITY

- Eligibility Eligible on or after age 40 and 15 years of vesting service.
- Benefit Amount equal to the normal retirement benefit accrued to date of disability, commencing immediately, offset by other disability benefits payable to the participant.

PRE-RETIREMENT DEATH

- Eligibility Eligible on or after five years of vesting service.
- Benefit Amount equal to 50% of the benefit the participant would have received had he retired under a 50% joint and survivor annuity on the first of the month following his death, or his earliest commencement age, if not yet eligible.

FORM OF BENEFITS

- Automatic form for unmarried participants Life annuity.
- Automatic form for married participants 50% Joint & Survivor.
- Optional forms Life annuity, 50% Joint & Survivor, 66 2/3% Joint & Survivor, 75% Joint & Survivor, 100% Joint & Survivor.

**OPTIONAL FORM OF
CONVERSION FACTORS**

UP84 mortality and 7% interest.

MISCELLANEOUS

- Maximum benefits Annual benefits may not exceed the limits in IRC Section 415. This limit is indexed annually. For 2017, the limit is \$215,000.

*Schedule SB, Part V — Summary of Plan Provisions***Benefits Included or Excluded**

Unless noted below, all benefits provided by the plan are included in this valuation.

- **Plan amendments excluded:** None.
- **Late retirement increases:**
 - *Active participants:* The plan provides benefit suspension notices to participants who work beyond normal retirement; therefore, late retirement actuarial increases only apply to participants who defer retirement beyond age 70½.
 - *Deferred vested participants:* Current deferred vested participants over normal retirement age are valued including the late retirement actuarial increase.
- **Internal Revenue Code limitations:** The limitations of Internal Revenue Code Section 415(b) and 401(a)(17) have been incorporated into our calculations.
- **IRC Section 416 rules for top-heavy plans:** We did not test whether this plan is top-heavy (when the present value of benefits for key employees equals or exceeds 60% of the present value for all participants). However, we expect that the plan is not top-heavy due to the large number of rank-and-file participants; therefore, the funding target and target normal cost do not reflect any liability for top-heavy benefit accruals.

Schedule SB, Part V — Summary of Plan Provisions

PLAN PROVISIONS SPECIFIC TO FUNDING

Additional Benefits Included or Excluded• **IRC Section 436 benefit restrictions:**

- *Unpredictable contingent event benefits:* See below.
- *Plan amendments:* See above.
- *Prohibited payments:* Limitations on prohibited benefits (if any) are reflected for annuity starting dates before the valuation date but are ignored for annuity starting dates on or after the valuation date.
- *Benefit accruals:* The plan's funding target does not reflect any limitation on benefit accruals. The target normal cost does not reflect any limitation on benefit accruals.

- **Scheduled benefit increases:** Scheduled benefit increases effective after the end of the current plan year are excluded from minimum funding requirements.
- **Unpredictable contingent event benefits:** The plan does not have any unpredictable contingent event benefits.

PLAN PROVISION CHANGES SINCE PRIOR VALUATION

- IRC 415(b) maximum benefit was updated from 2016 to 2017.

Schedule SB, line 24 — Change in Actuarial Assumptions

ACTUARIAL ASSUMPTION CHANGES SINCE PRIOR VALUATION

Funding

- The expected investment return on assets was changed from 4.28% to 4.11%.
- The administrative expense load was changed from \$145,000 to \$151,000.

Schedule SB, line 26 — Schedule of Active Participant Data

ATTAINED AGE	YEARS OF CREDITED SERVICE										TOTAL
	UNDER 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & UP	
Under 25		4									4
25-29		4	7								11
30-34		6	9	3							18
35-39		5	9	5	5	2					26
40-44		1	10	2	7	6	1				27
45-49		3	8	6	10	11	9				47
50-54		5	12	6	15	3	4	1	1		47
55-59		4	8	5	33	2	3		13		68
60-64		1	7	5	29		2		14	7	65
65-69			1		8						9
70 & up			1		2						3
Total		33	72	32	109	24	19	1	28	7	325

In each cell, the number is the count of active participants for each age/service combination.

Schedule SB, line 32 — Schedule of Amortization Bases

The total shortfall amortization charge is the sum of the individual shortfall amortization installment for each plan year since the IRC Section 430 changes made by the Pension Protection Act of 2006 (PPA) took effect for the plan. Although an individual shortfall amortization installment can be negative, the combined shortfall amortization charge cannot be less than \$0.

SHORTFALL BASES					
YEAR ESTABLISHED		OUTSTANDING BALANCE	YEARS REMAINING		2017 INSTALLMENT
2015	\$	873,251	5	\$	189,169
2016	\$	322,929	6		60,097
2017		(140,248)	7		(23,030)
Total	\$	1,055,932		\$	226,236

SCHEDULE SB (Form 5500) <small>Department of the Treasury Internal Revenue Service</small> <small>Department of Labor Employee Benefits Security Administration</small> <small>Pension Benefit Guaranty Corporation</small>	Single-Employer Defined Benefit Plan Actuarial Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6059 of the Internal Revenue Code (the Code). ► File as an attachment to Form 5500 or 5500-SF.	OMB No. 1210-0110 2017 This Form is Open to Public Inspection
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For calendar plan year 2017 or fiscal plan year beginning <u>01/01/2017</u> and ending <u>12/31/2017</u>			
► Round off amounts to nearest dollar.			
► Caution: A penalty of \$1,000 will be assessed for late filing of this report unless reasonable cause is established.			
A Name of plan PENTAIR PUMP GROUP, INC. BARGAINING UNIT EMPLOYEES PENSION PLAN	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:60%;">B Three-digit plan number (PN) ►</td> <td style="width:40%; text-align: center;">002</td> </tr> </table>	B Three-digit plan number (PN) ►	002
B Three-digit plan number (PN) ►	002		
C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF PENTAIR FLOW TECHNOLOGIES, LLC	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>D Employer Identification Number (EIN) 41-1881858</td> </tr> </table>	D Employer Identification Number (EIN) 41-1881858	
D Employer Identification Number (EIN) 41-1881858			
E Type of plan: ☒ Single ☐ Multiple-A ☐ Multiple-B F Prior year plan size: ☐ 100 or fewer ☐ 101-500 ☒ More than 500			

Part I Basic Information				
1 Enter the valuation date: Month <u>01</u> Day <u>01</u> Year <u>2017</u>				
2 Assets:				
a Market value.....	2a	17,549,803		
b Actuarial value	2b	17,454,937		
3 Funding target/participant count breakdown	(1) Number of participants	(2) Vested Funding Target	(3) Total Funding Target	
a For retired participants and beneficiaries receiving payment	78	3,527,339	3,527,339	
b For terminated vested participants	146	2,223,724	2,223,724	
c For active participants	325	7,748,332	7,828,430	
d Total	549	13,499,395	13,579,493	
4 If the plan is in at-risk status, check the box and complete lines (a) and (b) ☐				
a Funding target disregarding prescribed at-risk assumptions	4a			
b Funding target reflecting at-risk assumptions, but disregarding transition rule for plans that have been in at-risk status for fewer than five consecutive years and disregarding loading factor	4b			
5 Effective interest rate	5	6.03%		
6 Target normal cost	6	568,860		

Statement by Enrolled Actuary
 To the best of my knowledge, the information supplied in this schedule and accompanying schedules, statements and attachments, if any, is complete and accurate. Each prescribed assumption was applied in accordance with applicable law and regulations. In my opinion, each other assumption is reasonable (taking into account the experience of the plan and reasonable expectations) and such other assumptions, in combination, offer my best estimate of anticipated experience under the plan.

SIGN HERE	 Signature of actuary GREGORY T. TRAPP, ASA, EA, MAAA Type or print name of actuary MERCER Firm name 333 SOUTH 7TH STREET, SUITE 1400 MINNEAPOLIS MN 55402-2427 Address of the firm	 Date 1705207 Most recent enrollment number 612-642-8600 Telephone number (including area code)
------------------	---	--

Part II Beginning of Year Carryover and Prefunding Balances

	(a) Carryover balance	(b) Prefunding balance
7 Balance at beginning of prior year after applicable adjustments (line 13 from prior year).....	0	5,362,384
8 Portion elected for use to offset prior year's funding requirement (line 35 from prior year)	0	814,822
9 Amount remaining (line 7 minus line 8).....	0	4,547,562
10 Interest on line 9 using prior year's actual return of <u>8.44%</u>	0	383,814
11 Prior year's excess contributions to be added to prefunding balance:		
a Present value of excess contributions (line 38a from prior year)		0
b(1) Interest on the excess, if any, of line 38a over line 38b from prior year Schedule SB, using prior year's effective interest rate of <u>6.23%</u>		0
b(2) Interest on line 38b from prior year Schedule SB, using prior year's actual return		0
c Total available at beginning of current plan year to add to prefunding balance.....		0
d Portion of (c) to be added to prefunding balance.....		0
12 Other reductions in balances due to elections or deemed elections		
13 Balance at beginning of current year (line 9 + line 10 + line 11d – line 12)	0	4,931,376

Part III Funding Percentages

14 Funding target attainment percentage	14	92.22%
15 Adjusted funding target attainment percentage.....	15	128.53%
16 Prior year's funding percentage for purposes of determining whether carryover/prefunding balances may be used to reduce current year's funding requirement	16	88.94%
17 If the current value of the assets of the plan is less than 70 percent of the funding target, enter such percentage.	17	%

Part IV Contributions and Liquidity Shortfalls

18 Contributions made to the plan for the plan year by employer(s) and employees:					
(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees	(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees
09/10/2018	710,000	0			
Totals ▶			18(b)	710,000	18(c) 0

19 Discounted employer contributions – see instructions for small plan with a valuation date after the beginning of the year:			
a Contributions allocated toward unpaid minimum required contributions from prior years.....	19a		0
b Contributions made to avoid restrictions adjusted to valuation date	19b		0
c Contributions allocated toward minimum required contribution for current year adjusted to valuation date.....	19c		643,092
20 Quarterly contributions and liquidity shortfalls:			
a Did the plan have a “funding shortfall” for the prior year?.....			☒ Yes ☐ No
b If line 20a is “Yes,” were required quarterly installments for the current year made in a timely manner?			☐ Yes ☒ No
c If line 20a is “Yes,” see instructions and complete the following table as applicable:			
Liquidity shortfall as of end of quarter of this plan year			
(1) 1st	(2) 2nd	(3) 3rd	(4) 4th
0	0	0	0

Part V Assumptions Used to Determine Funding Target and Target Normal Cost

21 Discount rate:				
a Segment rates:	1st segment: 4.16 %	2nd segment: 5.72 %	3rd segment: 6.48 %	☐ N/A, full yield curve used
b Applicable month (enter code)				21b 4
22 Weighted average retirement age				22 65
23 Mortality table(s) (see instructions)	☐ Prescribed - combined ☒ Prescribed - separate ☐ Substitute			

Part VI Miscellaneous Items

24 Has a change been made in the non-prescribed actuarial assumptions for the current plan year? If "Yes," see instructions regarding required attachment.	☒ Yes ☐ No
25 Has a method change been made for the current plan year? If "Yes," see instructions regarding required attachment.	☐ Yes ☒ No
26 Is the plan required to provide a Schedule of Active Participants? If "Yes," see instructions regarding required attachment.	☒ Yes ☐ No
27 If the plan is subject to alternative funding rules, enter applicable code and see instructions regarding attachment	27

Part VII Reconciliation of Unpaid Minimum Required Contributions For Prior Years

28 Unpaid minimum required contributions for all prior years	28	0
29 Discounted employer contributions allocated toward unpaid minimum required contributions from prior years (line 19a)	29	0
30 Remaining amount of unpaid minimum required contributions (line 28 minus line 29)	30	0

Part VIII Minimum Required Contribution For Current Year

31 Target normal cost and excess assets (see instructions):			
a Target normal cost (line 6)	31a	568,860	
b Excess assets, if applicable, but not greater than line 31a	31b	0	
32 Amortization installments:			
a Net shortfall amortization installment	Outstanding Balance	Installment	
b Waiver amortization installment	1,055,932	226,236	
	0	0	
33 If a waiver has been approved for this plan year, enter the date of the ruling letter granting the approval (Month _____ Day _____ Year _____) and the waived amount	33		
34 Total funding requirement before reflecting carryover/prefunding balances (lines 31a - 31b + 32a + 32b - 33)....	34	795,096	
	Carryover balance	Prefunding balance	Total balance
35 Balances elected for use to offset funding requirement	0	795,096	795,096
36 Additional cash requirement (line 34 minus line 35)	36	0	
37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c)	37	643,092	
38 Present value of excess contributions for current year (see instructions)			
a Total (excess, if any, of line 37 over line 36)	38a	643,092	
b Portion included in line 38a attributable to use of prefunding and funding standard carryover balances	38b	643,092	
39 Unpaid minimum required contribution for current year (excess, if any, of line 36 over line 37)	39	0	
40 Unpaid minimum required contributions for all years	40	0	

Part IX Pension Funding Relief Under Pension Relief Act of 2010 (See Instructions)

41 If an election was made to use PRA 2010 funding relief for this plan:			
a Schedule elected	☐ 2 plus 7 years ☐ 15 years		
b Eligible plan year(s) for which the election in line 41a was made	☐ 2008 ☐ 2009 ☐ 2010 ☐ 2011		
42 Amount of acceleration adjustment	42		
43 Excess installment acceleration amount to be carried over to future plan years	43		

Schedule SB, Line 8 – Late Election to Apply Balances to Quarterly Installments

The balances used to offset funding requirement reported on line 35 of the 2016 Schedule SB was \$814,349 of prefunding balance. The portion used to offset prior year's funding requirement reported on line 8a of the 2017 Schedule SB is \$814,822. The discrepancy is a result of the sponsor making a late election to apply carryover balance to quarterly funding requirements. The amount shown on line 8a of the 2017 Schedule SB reflects an interest penalty of \$473 for the late election.

Schedule SB, Part V — Statement of Actuarial Assumption/Methods

ACTUARIAL ASSUMPTIONS FOR JANUARY 1, 2017 FUNDING VALUATION

DISCOUNT RATE SPONSOR ELECTIONS			
------------------------------------	--	--	--

- Segment rates or full yield curve Segment
- Look-back months 4
- Use stabilized rates – funding Yes
- Use stabilized rates – Section 436 benefit restrictions Yes

	<u>Stabilized rates</u> (BBA'17)	<u>Nonstabilized rates</u>
• First 5 years	4.16%	1.52%
• Next 15 years	5.72%	3.80%
• Over 20 years	6.48%	4.79%

Rationale: Prescribed assumption by the IRS and the PBGC

*Schedule SB, Part V — Statement of Actuarial Assumption/Methods***MORTALITY SPONSOR
ELECTIONS**

Section 430(h)(3) prescribed separate static annuitant and nonannuitant mortality tables. These tables are based on the RP-2000 mortality tables projected with mortality improvement to the valuation year plus 7 and 15 years based on Scale AA.

Rationale: Prescribed assumption by the IRS

OTHER ECONOMIC ASSUMPTIONS

- Expected investment return 3.65% for year 2015, 4.28% for year 2016 and 4.11% for year 2017.
Rationale: Based on the expected yield of a dedicated high quality bond portfolio constructed to match the qualified pension plan's projected benefit payments.
- Expenses \$151,000 added to current year normal cost.
Rationale: Prior year's actual administrative expense adjusted for expected changes in PBGC premiums.

DEMOGRAPHIC ASSUMPTIONS

- Withdrawal Sum of (a) and (b)
 - a) Three times the rates in the Massachusetts Mutual A. Table for Males.
 - b) Two times Hunter's Rates for males and four times Hunter's Rates for females.

See table of sample rates.
- Disability incidence **None.**
- Retirement age Age 65. (Individuals employed at the Kansas City location who had attained age 50 and earned five years of credited service as of October 1, 1996 are assumed to retire at age 62.)
- Benefit commencement age for
 - Future vested deferred 65
 - Current vested deferred 65
- Spouse assumptions **MALE PARTICIPANTS** **FEMALE PARTICIPANTS**

Schedule SB, Part V — Statement of Actuarial Assumption/Methods

– Percentage married	75%	75%	
– Spouse age difference	2 years younger	2 years older	
FORM OF PAYMENT	<u>SINGLE LIFE</u>	<u>50% J&S</u>	<u>100% J&S</u>
• Active retirements	50%	25%	25%
• Future vested deferred	50%	25%	25%
• Future deaths	100%	0%	0%
• Current vested deferred	50%	25%	25%
UNPREDICTABLE CONTINGENT EVENT ASSUMPTIONS	N/A		

Table of Sample Rates

ATTAINED AGE	WITHDRAWAL	
	MALE	FEMALE
20	22.3%	22.4%
25	16.3%	16.4%
30	10.3%	10.4%
35	7.2%	7.3%
40	4.1%	4.2%
45	2.2%	2.4%
50	0.3%	0.7%
55	0.6%	1.1%

Schedule SB, Part V — Statement of Actuarial Assumption/Methods

60	1.1%	2.2%
----	------	------

Rationale for demographic and form of payment assumptions: The plan sponsor believes these assumptions to be reasonable and representative of current and future expected experience. The plan's signing actuary monitors experience annually and has not detected any significant gains or losses.

ACTUARIAL METHODS FOR FUNDING**Asset Methods – effective January 1, 2009**

The asset valuation method is an average of the adjusted market value for each year during the last two years preceding the valuation date. The adjusted market value is the market value at each determination date adjusted to the valuation date based on actual cash flows and expected interest at the lesser of the expected rate of return and the third segment rate. This amount is adjusted to be no greater than 110 percent and no less than 90 percent of the fair market value, as defined in IRC Section 430.

A characteristic of this asset method is that, over time, it is slightly more likely to produce an actuarial value of assets that is less than the market value of assets than an actuarial value that is greater than the market value.

Participant Methods – Effective January 1, 2008

Participants or former participants are included or excluded from the valuation as described below:

- **Participants included:** The plan sponsor and Willis Towers Watson provided us with participant data as of the valuation date.
- **Participants excluded:** No actuarial liability is included for non-vested participants who terminated prior to the valuation date. For this purpose, participants with a break in service on the valuation date are treated as terminated participants.
- **Insurance contracts:** The plan does not have any insurance contracts.

*Schedule SB, Part V — Statement of Actuarial Assumption/Methods***Minimum Funding Methods – Effective January 1, 2008**

The funding target for minimum funding calculations is computed using the traditional unit credit method of funding. The objective under this method is to fund each participant's benefits under the plan as they accrue. Thus, the total pension to which each participant is expected to become entitled at retirement is broken down into units, each associated with a year of past or future credited service.

A detailed description of the calculation follows:

- The plan's valuation date is the beginning of the plan year.
- An individual's **funding target** is the present value of future benefits based on credited service and average pay as of the beginning of the plan year, and an individual's **target normal cost** is the present value of the benefit expected to accrue in the plan year. If multiple decrements are used, the funding target and the target normal cost for an individual is the sum of the component funding targets and target normal costs associated with the various anticipated separation dates.
- The plan's **target normal cost** is the sum of the individual target normal costs, and the plan's **funding target** is the sum of the individual funding targets for all participants under the plan.

*Schedule SB, Part V — Summary of Plan Provisions***SUMMARY OF MAJOR PLAN PROVISIONS**

Effective date and plan year	Restated plan: January 1, 2009 Plan year: Calendar year
Status of the plan	The plan has ongoing benefit accruals and, except for Kansas City USWA, new employees are eligible to participate in the plan once they satisfy the participation requirements.
Significant events that occurred during the year	Benefits for Aurora IAM participants were updated due to negotiation.

DEFINITIONS

- **Employees Covered** All hourly employees of the Pentair Pump Group, Inc. employed in an hourly rate position, and represented by a union. Kansas City USWA employees hired after January 1, 2015 are not eligible for the plan. F.E. Meyers (Ashland) GMP employees hired after 4/5/2011 are not eligible for the plan. Aurora IAM employees hired after 1/1/2018 will not participate in the plan.
- **Participation** All covered employees participate upon completing one year of service and attaining age 21.
- **Vesting service** Full and fractional years of service. Any fractional remainder of days less than 30 shall be treated as one month.
- **Credited service** Full and fractional years of service, with service earned for any month in which one or more days are worked. Employees of the former General Signal locations begin earning credited service on the later of their hire date or August 23, 1997.

*Schedule SB, Part V — Summary of Plan Provisions***NORMAL RETIREMENT**

- Eligibility Later of age 65 and five years of participation.
- Benefit Amount equal to product of (a) and (b):
 - (a) Number of years of credited service (limited to 37 years for Molders).
 - (b) The benefit rate shown below:

Effective Date	Machinists	Molders	Ashland	Kansas City	Aurora
1/01/88	\$ 12.00	\$ 10.25			
4/04/88	12.00	10.50			
4/03/89	12.50	10.75			
9/01/89	12.50	10.75			
4/02/90	13.00	11.00			
9/01/90	13.00	11.00			
4/01/91	13.50	11.00			
5/01/92	14.00	11.00			
4/01/97	14.00	11.00			
8/23/97	14.00	11.00	\$17.00	\$19.50	\$20.00
10/1/01	14.00	11.00	17.00	20.50	20.00
6/23/02	14.00	11.00	17.00	20.50	21.00
10/1/02	14.00	11.00	18.00	20.50	21.00
10/1/03		11.00	18.50	21.00	21.00
6/21/04			18.50	21.00	21.50
1/01/05			15.50	21.00	21.50
10/1/06				22.00	21.50
6/25/07					22.00
6/22/09					22.50
6/21/11					23.00
6/25/12					24.00
6/23/14					25.00
6/22/15					25.50
6/20/16					26.00
6/25/17					27.25
6/23/18					28.25
6/22/19					29.50
6/20/20					30.50
6/20/21					31.75

*Schedule SB, Part V — Summary of Plan Provisions***NORMAL RETIREMENT**
(CONTINUED)

The Ashland (Hydromatic) plant closed December 31, 2004. Any active employee as of January 1, 2005 has an accrued benefit based on \$18.50 per year of service, and will receive F.E. Myers IAM benefit rates for future service as they are now F.E. Myers IAM employees. F.E. Myers IAM employees have a benefit equal to their credited service through 4/6/2003 times \$14.00 plus credited service from 4/7/2003 to 4/4/2004 times \$15.00 plus credited service from 4/5/2004 to 4/6/2008 times \$15.50 plus credited service from 4/7/2008 to 4/6/2009 times \$16.00 plus credited service from 4/7/2009 to 4/6/2010 times \$16.50 plus credited service from 4/7/2010 to 4/6/2011 times \$17.00 plus credited service from 4/7/2011 to 4/6/2012 times \$17.50 plus credited service from 4/7/2012 to 4/6/2013 times \$18.00 plus credited service from 4/7/2013 to 4/6/2015 times \$19.00 plus credited service from 4/7/2015 to 4/6/2017 times \$20.00 plus credited service from 4/7/2017 times \$21.00.

F.E. Myers GMP employees have a benefit equal to their credited service through 4/3/2004 times \$11.00 plus credited service from 4/4/2004 to 4/2/2006 times \$12.00 plus credited service from 4/3/2006 to 3/31/2016 times \$12.50 plus credited service after 4/1/2016 times \$13.00.

Kansas City (Fairbanks Morse) employees have a benefit equal to their credited service through 10/1/2009 times \$22.00 plus credited service from 10/1/2009 to 10/1/2014 times \$23.50 plus credited service from 10/1/2014 times \$25.00.

*Schedule SB, Part V — Summary of Plan Provisions***EARLY RETIREMENT**

- Eligibility Eligible on or after age 55 and 15 years of vesting service.
- Benefit Amount equal to the normal retirement benefit, based on service at termination reduced by 0.6% for each month commencement precedes normal retirement. Kansas City employees who had attained age 50 and had five years of service as of October 1, 1996 have benefits reduced for early retirement based on the following table:

<u>Retirement Age</u>	<u>Reduction Factor</u>
64	3%
63	5
62	9
61	13
60	17
59	30
58	35
57	40
56	45
55	50

LATE RETIREMENT

- Eligibility Eligible after the normal retirement date.
- Benefit Greater of the normal retirement benefit actuarially increased to the earlier of the date the suspension of benefits notice was given and the date of termination, and the benefit at date of termination.

*Schedule SB, Part V — Summary of Plan Provisions***DEFERRED VESTED**

- Eligibility Eligible on or after five years of vesting service.
- Benefit Amount equal to the normal retirement benefit using the credited service and dollar amounts at date of termination, with payments commencing at age 65. May commence as early as age 55 if 15 years of vesting service, with a reduction for early retirement (as shown above).

DISABILITY

- Eligibility Eligible on or after age 40 and 15 years of vesting service.
- Benefit Amount equal to the normal retirement benefit accrued to date of disability, commencing immediately, offset by other disability benefits payable to the participant.

PRE-RETIREMENT DEATH

- Eligibility Eligible on or after five years of vesting service.
- Benefit Amount equal to 50% of the benefit the participant would have received had he retired under a 50% joint and survivor annuity on the first of the month following his death, or his earliest commencement age, if not yet eligible.

FORM OF BENEFITS

- Automatic form for unmarried participants Life annuity.
- Automatic form for married participants 50% Joint & Survivor.
- Optional forms Life annuity, 50% Joint & Survivor, 66 2/3% Joint & Survivor, 75% Joint & Survivor, 100% Joint & Survivor.

**OPTIONAL FORM OF
CONVERSION FACTORS**

UP84 mortality and 7% interest.

MISCELLANEOUS

- Maximum benefits Annual benefits may not exceed the limits in IRC Section 415. This limit is indexed annually. For 2017, the limit is \$215,000.

*Schedule SB, Part V — Summary of Plan Provisions***Benefits Included or Excluded**

Unless noted below, all benefits provided by the plan are included in this valuation.

- **Plan amendments excluded:** None.
- **Late retirement increases:**
 - *Active participants:* The plan provides benefit suspension notices to participants who work beyond normal retirement; therefore, late retirement actuarial increases only apply to participants who defer retirement beyond age 70½.
 - *Deferred vested participants:* Current deferred vested participants over normal retirement age are valued including the late retirement actuarial increase.
- **Internal Revenue Code limitations:** The limitations of Internal Revenue Code Section 415(b) and 401(a)(17) have been incorporated into our calculations.
- **IRC Section 416 rules for top-heavy plans:** We did not test whether this plan is top-heavy (when the present value of benefits for key employees equals or exceeds 60% of the present value for all participants). However, we expect that the plan is not top-heavy due to the large number of rank-and-file participants; therefore, the funding target and target normal cost do not reflect any liability for top-heavy benefit accruals.

Schedule SB, Part V — Summary of Plan Provisions

PLAN PROVISIONS SPECIFIC TO FUNDING

Additional Benefits Included or Excluded• **IRC Section 436 benefit restrictions:**

- *Unpredictable contingent event benefits:* See below.
- *Plan amendments:* See above.
- *Prohibited payments:* Limitations on prohibited benefits (if any) are reflected for annuity starting dates before the valuation date but are ignored for annuity starting dates on or after the valuation date.
- *Benefit accruals:* The plan's funding target does not reflect any limitation on benefit accruals. The target normal cost does not reflect any limitation on benefit accruals.

- **Scheduled benefit increases:** Scheduled benefit increases effective after the end of the current plan year are excluded from minimum funding requirements.
- **Unpredictable contingent event benefits:** The plan does not have any unpredictable contingent event benefits.

PLAN PROVISION CHANGES SINCE PRIOR VALUATION

- IRC 415(b) maximum benefit was updated from 2016 to 2017.

Schedule SB, line 24 — Change in Actuarial Assumptions

ACTUARIAL ASSUMPTION CHANGES SINCE PRIOR VALUATION

Funding

- The expected investment return on assets was changed from 4.28% to 4.11%.
- The administrative expense load was changed from \$145,000 to \$151,000.

Schedule SB, line 26 — Schedule of Active Participant Data

ATTAINED AGE	YEARS OF CREDITED SERVICE										TOTAL
	UNDER 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & UP	
Under 25		4									4
25-29		4	7								11
30-34		6	9	3							18
35-39		5	9	5	5	2					26
40-44		1	10	2	7	6	1				27
45-49		3	8	6	10	11	9				47
50-54		5	12	6	15	3	4	1	1		47
55-59		4	8	5	33	2	3		13		68
60-64		1	7	5	29		2		14	7	65
65-69			1		8						9
70 & up			1		2						3
Total		33	72	32	109	24	19	1	28	7	325

In each cell, the number is the count of active participants for each age/service combination.

Schedule SB, line 32 — Schedule of Amortization Bases

The total shortfall amortization charge is the sum of the individual shortfall amortization installment for each plan year since the IRC Section 430 changes made by the Pension Protection Act of 2006 (PPA) took effect for the plan. Although an individual shortfall amortization installment can be negative, the combined shortfall amortization charge cannot be less than \$0.

SHORTFALL BASES					
YEAR ESTABLISHED		OUTSTANDING BALANCE	YEARS REMAINING		2017 INSTALLMENT
2015	\$	873,251	5	\$	189,169
2016	\$	322,929	6		60,097
2017		(140,248)	7		(23,030)
Total	\$	1,055,932		\$	226,236

SCHEDULE SB (Form 5500) <small>Department of the Treasury Internal Revenue Service</small> <small>Department of Labor Employee Benefits Security Administration</small> <small>Pension Benefit Guaranty Corporation</small>	Single-Employer Defined Benefit Plan Actuarial Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6059 of the Internal Revenue Code (the Code). ► File as an attachment to Form 5500 or 5500-SF.	OMB No. 1210-0110 2017 This Form is Open to Public Inspection
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For calendar plan year 2017 or fiscal plan year beginning <u>01/01/2017</u> and ending <u>12/31/2017</u>			
► Round off amounts to nearest dollar.			
► Caution: A penalty of \$1,000 will be assessed for late filing of this report unless reasonable cause is established.			
A Name of plan PENTAIR PUMP GROUP, INC. BARGAINING UNIT EMPLOYEES PENSION PLAN	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:60%;">B Three-digit plan number (PN) ►</td> <td style="width:40%; text-align: center;">002</td> </tr> </table>	B Three-digit plan number (PN) ►	002
B Three-digit plan number (PN) ►	002		
C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF PENTAIR FLOW TECHNOLOGIES, LLC	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>D Employer Identification Number (EIN) 41-1881858</td> </tr> </table>	D Employer Identification Number (EIN) 41-1881858	
D Employer Identification Number (EIN) 41-1881858			
E Type of plan: ☒ Single ☐ Multiple-A ☐ Multiple-B F Prior year plan size: ☐ 100 or fewer ☐ 101-500 ☒ More than 500			

Part I Basic Information				
1 Enter the valuation date: Month <u>01</u> Day <u>01</u> Year <u>2017</u>				
2 Assets:				
a Market value.....	2a	17,549,803		
b Actuarial value.....	2b	17,454,937		
3 Funding target/participant count breakdown	(1) Number of participants	(2) Vested Funding Target	(3) Total Funding Target	
a For retired participants and beneficiaries receiving payment	78	3,527,339	3,527,339	
b For terminated vested participants	146	2,223,724	2,223,724	
c For active participants	325	7,748,332	7,828,430	
d Total.....	549	13,499,395	13,579,493	
4 If the plan is in at-risk status, check the box and complete lines (a) and (b) ☐				
a Funding target disregarding prescribed at-risk assumptions.....	4a			
b Funding target reflecting at-risk assumptions, but disregarding transition rule for plans that have been in at-risk status for fewer than five consecutive years and disregarding loading factor.....	4b			
5 Effective interest rate.....	5	6.03%		
6 Target normal cost	6	568,860		

Statement by Enrolled Actuary
 To the best of my knowledge, the information supplied in this schedule and accompanying schedules, statements and attachments, if any, is complete and accurate. Each prescribed assumption was applied in accordance with applicable law and regulations. In my opinion, each other assumption is reasonable (taking into account the experience of the plan and reasonable expectations) and such other assumptions, in combination, offer my best estimate of anticipated experience under the plan.

SIGN HERE		<u>9/25/2018</u>
	Signature of actuary	Date
	GREGORY T. TRAPP, ASA, EA, MAAA	1705207
	Type or print name of actuary	Most recent enrollment number
	MERCER	612-642-8600
	Firm name	Telephone number (including area code)
	333 SOUTH 7TH STREET, SUITE 1400	
	MINNEAPOLIS MN 55402-2427	
	Address of the firm	

If the actuary has not fully reflected any regulation or ruling promulgated under the statute in completing this schedule, check the box and see instructions ☐

For Paperwork Reduction Act Notice, see the Instructions for Form 5500 or 5500-SF. **Schedule SB (Form 5500) 2017**

Part II Beginning of Year Carryover and Prefunding Balances

	(a) Carryover balance	(b) Prefunding balance
7 Balance at beginning of prior year after applicable adjustments (line 13 from prior year).....	0	5,362,384
8 Portion elected for use to offset prior year's funding requirement (line 35 from prior year)	0	814,822
9 Amount remaining (line 7 minus line 8).....	0	4,547,562
10 Interest on line 9 using prior year's actual return of <u>8.44%</u>	0	383,814
11 Prior year's excess contributions to be added to prefunding balance:		
a Present value of excess contributions (line 38a from prior year)		0
b(1) Interest on the excess, if any, of line 38a over line 38b from prior year Schedule SB, using prior year's effective interest rate of <u>6.23%</u>		0
b(2) Interest on line 38b from prior year Schedule SB, using prior year's actual return		0
c Total available at beginning of current plan year to add to prefunding balance.....		0
d Portion of (c) to be added to prefunding balance.....		0
12 Other reductions in balances due to elections or deemed elections		
13 Balance at beginning of current year (line 9 + line 10 + line 11d – line 12)	0	4,931,376

Part III Funding Percentages

14 Funding target attainment percentage	14	92.22%
15 Adjusted funding target attainment percentage.....	15	128.53%
16 Prior year's funding percentage for purposes of determining whether carryover/prefunding balances may be used to reduce current year's funding requirement	16	88.94%
17 If the current value of the assets of the plan is less than 70 percent of the funding target, enter such percentage.	17	%

Part IV Contributions and Liquidity Shortfalls

18 Contributions made to the plan for the plan year by employer(s) and employees:					
(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees	(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees
09/10/2018	710,000	0			
Totals ▶			18(b)	710,000	18(c) 0

19 Discounted employer contributions – see instructions for small plan with a valuation date after the beginning of the year:			
a Contributions allocated toward unpaid minimum required contributions from prior years.....	19a		0
b Contributions made to avoid restrictions adjusted to valuation date	19b		0
c Contributions allocated toward minimum required contribution for current year adjusted to valuation date.....	19c		643,092
20 Quarterly contributions and liquidity shortfalls:			
a Did the plan have a “funding shortfall” for the prior year?.....			☒ Yes ☐ No
b If line 20a is “Yes,” were required quarterly installments for the current year made in a timely manner?			☐ Yes ☒ No
c If line 20a is “Yes,” see instructions and complete the following table as applicable:			
Liquidity shortfall as of end of quarter of this plan year			
(1) 1st	(2) 2nd	(3) 3rd	(4) 4th
0	0	0	0

Part V Assumptions Used to Determine Funding Target and Target Normal Cost

21 Discount rate:			
a Segment rates:	1st segment: 4.16 %	2nd segment: 5.72 %	3rd segment: 6.48 %
			☐ N/A, full yield curve used
b Applicable month (enter code)			21b 4
22 Weighted average retirement age			22 65
23 Mortality table(s) (see instructions) ☐ Prescribed - combined ☒ Prescribed - separate ☐ Substitute			

Part VI Miscellaneous Items

24 Has a change been made in the non-prescribed actuarial assumptions for the current plan year? If "Yes," see instructions regarding required attachment.	☒ Yes ☐ No
25 Has a method change been made for the current plan year? If "Yes," see instructions regarding required attachment.	☐ Yes ☒ No
26 Is the plan required to provide a Schedule of Active Participants? If "Yes," see instructions regarding required attachment.	☒ Yes ☐ No
27 If the plan is subject to alternative funding rules, enter applicable code and see instructions regarding attachment	27

Part VII Reconciliation of Unpaid Minimum Required Contributions For Prior Years

28 Unpaid minimum required contributions for all prior years	28	0
29 Discounted employer contributions allocated toward unpaid minimum required contributions from prior years (line 19a)	29	0
30 Remaining amount of unpaid minimum required contributions (line 28 minus line 29)	30	0

Part VIII Minimum Required Contribution For Current Year

31 Target normal cost and excess assets (see instructions):			
a Target normal cost (line 6)		31a	568,860
b Excess assets, if applicable, but not greater than line 31a		31b	0
32 Amortization installments:	Outstanding Balance	Installment	
a Net shortfall amortization installment	1,055,932	226,236	
b Waiver amortization installment	0	0	
33 If a waiver has been approved for this plan year, enter the date of the ruling letter granting the approval (Month _____ Day _____ Year _____) and the waived amount		33	
34 Total funding requirement before reflecting carryover/prefunding balances (lines 31a - 31b + 32a + 32b - 33)....		34	795,096
	Carryover balance	Prefunding balance	Total balance
35 Balances elected for use to offset funding requirement	0	795,096	795,096
36 Additional cash requirement (line 34 minus line 35)		36	0
37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c)		37	643,092
38 Present value of excess contributions for current year (see instructions)			
a Total (excess, if any, of line 37 over line 36)		38a	643,092
b Portion included in line 38a attributable to use of prefunding and funding standard carryover balances		38b	643,092
39 Unpaid minimum required contribution for current year (excess, if any, of line 36 over line 37)		39	0
40 Unpaid minimum required contributions for all years		40	0

Part IX Pension Funding Relief Under Pension Relief Act of 2010 (See Instructions)

41 If an election was made to use PRA 2010 funding relief for this plan:			
a Schedule elected		☐ 2 plus 7 years ☐ 15 years	
b Eligible plan year(s) for which the election in line 41a was made		☐ 2008 ☐ 2009 ☐ 2010 ☐ 2011	
42 Amount of acceleration adjustment		42	
43 Excess installment acceleration amount to be carried over to future plan years		43	

Schedule SB, Line 8 – Late Election to Apply Balances to Quarterly Installments

The balances used to offset funding requirement reported on line 35 of the 2016 Schedule SB was \$814,349 of prefunding balance. The portion used to offset prior year's funding requirement reported on line 8a of the 2017 Schedule SB is \$814,822. The discrepancy is a result of the sponsor making a late election to apply carryover balance to quarterly funding requirements. The amount shown on line 8a of the 2017 Schedule SB reflects an interest penalty of \$473 for the late election.

Schedule SB, Part V — Statement of Actuarial Assumption/Methods

ACTUARIAL ASSUMPTIONS FOR JANUARY 1, 2017 FUNDING VALUATION

DISCOUNT RATE SPONSOR ELECTIONS			
------------------------------------	--	--	--

- Segment rates or full yield curve Segment
- Look-back months 4
- Use stabilized rates – funding Yes
- Use stabilized rates – Section 436 benefit restrictions Yes

	<u>Stabilized rates</u> (BBA'17)	<u>Nonstabilized rates</u>
• First 5 years	4.16%	1.52%
• Next 15 years	5.72%	3.80%
• Over 20 years	6.48%	4.79%

Rationale: Prescribed assumption by the IRS and the PBGC

*Schedule SB, Part V — Statement of Actuarial Assumption/Methods***MORTALITY SPONSOR
ELECTIONS**

Section 430(h)(3) prescribed separate static annuitant and nonannuitant mortality tables. These tables are based on the RP-2000 mortality tables projected with mortality improvement to the valuation year plus 7 and 15 years based on Scale AA.

Rationale: Prescribed assumption by the IRS

OTHER ECONOMIC ASSUMPTIONS

- Expected investment return 3.65% for year 2015, 4.28% for year 2016 and 4.11% for year 2017.
Rationale: Based on the expected yield of a dedicated high quality bond portfolio constructed to match the qualified pension plan's projected benefit payments.
- Expenses \$151,000 added to current year normal cost.
Rationale: Prior year's actual administrative expense adjusted for expected changes in PBGC premiums.

DEMOGRAPHIC ASSUMPTIONS

- Withdrawal Sum of (a) and (b)
 - a) Three times the rates in the Massachusetts Mutual A. Table for Males.
 - b) Two times Hunter's Rates for males and four times Hunter's Rates for females.

See table of sample rates.
- Disability incidence **None.**
- Retirement age Age 65. (Individuals employed at the Kansas City location who had attained age 50 and earned five years of credited service as of October 1, 1996 are assumed to retire at age 62.)
- Benefit commencement age for
 - Future vested deferred 65
 - Current vested deferred 65
- Spouse assumptions **MALE PARTICIPANTS** **FEMALE PARTICIPANTS**

Schedule SB, Part V — Statement of Actuarial Assumption/Methods

– Percentage married	75%	75%	
– Spouse age difference	2 years younger	2 years older	
FORM OF PAYMENT	<u>SINGLE LIFE</u>	<u>50% J&S</u>	<u>100% J&S</u>
• Active retirements	50%	25%	25%
• Future vested deferred	50%	25%	25%
• Future deaths	100%	0%	0%
• Current vested deferred	50%	25%	25%
UNPREDICTABLE CONTINGENT EVENT ASSUMPTIONS	N/A		

Table of Sample Rates

ATTAINED AGE	WITHDRAWAL	
	MALE	FEMALE
20	22.3%	22.4%
25	16.3%	16.4%
30	10.3%	10.4%
35	7.2%	7.3%
40	4.1%	4.2%
45	2.2%	2.4%
50	0.3%	0.7%
55	0.6%	1.1%

Schedule SB, Part V — Statement of Actuarial Assumption/Methods

60	1.1%	2.2%
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Rationale for demographic and form of payment assumptions: The plan sponsor believes these assumptions to be reasonable and representative of current and future expected experience. The plan's signing actuary monitors experience annually and has not detected any significant gains or losses.

ACTUARIAL METHODS FOR FUNDING**Asset Methods – effective January 1, 2009**

The asset valuation method is an average of the adjusted market value for each year during the last two years preceding the valuation date. The adjusted market value is the market value at each determination date adjusted to the valuation date based on actual cash flows and expected interest at the lesser of the expected rate of return and the third segment rate. This amount is adjusted to be no greater than 110 percent and no less than 90 percent of the fair market value, as defined in IRC Section 430.

A characteristic of this asset method is that, over time, it is slightly more likely to produce an actuarial value of assets that is less than the market value of assets than an actuarial value that is greater than the market value.

Participant Methods – Effective January 1, 2008

Participants or former participants are included or excluded from the valuation as described below:

- **Participants included:** The plan sponsor and Willis Towers Watson provided us with participant data as of the valuation date.
- **Participants excluded:** No actuarial liability is included for non-vested participants who terminated prior to the valuation date. For this purpose, participants with a break in service on the valuation date are treated as terminated participants.
- **Insurance contracts:** The plan does not have any insurance contracts.

*Schedule SB, Part V — Statement of Actuarial Assumption/Methods***Minimum Funding Methods – Effective January 1, 2008**

The funding target for minimum funding calculations is computed using the traditional unit credit method of funding. The objective under this method is to fund each participant's benefits under the plan as they accrue. Thus, the total pension to which each participant is expected to become entitled at retirement is broken down into units, each associated with a year of past or future credited service.

A detailed description of the calculation follows:

- The plan's valuation date is the beginning of the plan year.
- An individual's **funding target** is the present value of future benefits based on credited service and average pay as of the beginning of the plan year, and an individual's **target normal cost** is the present value of the benefit expected to accrue in the plan year. If multiple decrements are used, the funding target and the target normal cost for an individual is the sum of the component funding targets and target normal costs associated with the various anticipated separation dates.
- The plan's **target normal cost** is the sum of the individual target normal costs, and the plan's **funding target** is the sum of the individual funding targets for all participants under the plan.

*Schedule SB, Part V — Summary of Plan Provisions***SUMMARY OF MAJOR PLAN PROVISIONS**

Effective date and plan year	Restated plan: January 1, 2009 Plan year: Calendar year
Status of the plan	The plan has ongoing benefit accruals and, except for Kansas City USWA, new employees are eligible to participate in the plan once they satisfy the participation requirements.
Significant events that occurred during the year	Benefits for Aurora IAM participants were updated due to negotiation.

DEFINITIONS

- **Employees Covered** All hourly employees of the Pentair Pump Group, Inc. employed in an hourly rate position, and represented by a union. Kansas City USWA employees hired after January 1, 2015 are not eligible for the plan. F.E. Meyers (Ashland) GMP employees hired after 4/5/2011 are not eligible for the plan. Aurora IAM employees hired after 1/1/2018 will not participate in the plan.
- **Participation** All covered employees participate upon completing one year of service and attaining age 21.
- **Vesting service** Full and fractional years of service. Any fractional remainder of days less than 30 shall be treated as one month.
- **Credited service** Full and fractional years of service, with service earned for any month in which one or more days are worked. Employees of the former General Signal locations begin earning credited service on the later of their hire date or August 23, 1997.

*Schedule SB, Part V — Summary of Plan Provisions***NORMAL RETIREMENT**

- Eligibility Later of age 65 and five years of participation.

- Benefit Amount equal to product of (a) and (b):

(a) Number of years of credited service (limited to 37 years for Molders).

(b) The benefit rate shown below:

Effective Date	Machinists	Molders	Ashland	Kansas City	Aurora
1/01/88	\$ 12.00	\$ 10.25			
4/04/88	12.00	10.50			
4/03/89	12.50	10.75			
9/01/89	12.50	10.75			
4/02/90	13.00	11.00			
9/01/90	13.00	11.00			
4/01/91	13.50	11.00			
5/01/92	14.00	11.00			
4/01/97	14.00	11.00			
8/23/97	14.00	11.00	\$17.00	\$19.50	\$20.00
10/1/01	14.00	11.00	17.00	20.50	20.00
6/23/02	14.00	11.00	17.00	20.50	21.00
10/1/02	14.00	11.00	18.00	20.50	21.00
10/1/03		11.00	18.50	21.00	21.00
6/21/04			18.50	21.00	21.50
1/01/05			15.50	21.00	21.50
10/1/06				22.00	21.50
6/25/07					22.00
6/22/09					22.50
6/21/11					23.00
6/25/12					24.00
6/23/14					25.00
6/22/15					25.50
6/20/16					26.00
6/25/17					27.25
6/23/18					28.25
6/22/19					29.50
6/20/20					30.50
6/20/21					31.75

*Schedule SB, Part V — Summary of Plan Provisions***NORMAL RETIREMENT**
(CONTINUED)

The Ashland (Hydromatic) plant closed December 31, 2004. Any active employee as of January 1, 2005 has an accrued benefit based on \$18.50 per year of service, and will receive F.E. Myers IAM benefit rates for future service as they are now F.E. Myers IAM employees. F.E. Myers IAM employees have a benefit equal to their credited service through 4/6/2003 times \$14.00 plus credited service from 4/7/2003 to 4/4/2004 times \$15.00 plus credited service from 4/5/2004 to 4/6/2008 times \$15.50 plus credited service from 4/7/2008 to 4/6/2009 times \$16.00 plus credited service from 4/7/2009 to 4/6/2010 times \$16.50 plus credited service from 4/7/2010 to 4/6/2011 times \$17.00 plus credited service from 4/7/2011 to 4/6/2012 times \$17.50 plus credited service from 4/7/2012 to 4/6/2013 times \$18.00 plus credited service from 4/7/2013 to 4/6/2015 times \$19.00 plus credited service from 4/7/2015 to 4/6/2017 times \$20.00 plus credited service from 4/7/2017 times \$21.00.

F.E. Myers GMP employees have a benefit equal to their credited service through 4/3/2004 times \$11.00 plus credited service from 4/4/2004 to 4/2/2006 times \$12.00 plus credited service from 4/3/2006 to 3/31/2016 times \$12.50 plus credited service after 4/1/2016 times \$13.00.

Kansas City (Fairbanks Morse) employees have a benefit equal to their credited service through 10/1/2009 times \$22.00 plus credited service from 10/1/2009 to 10/1/2014 times \$23.50 plus credited service from 10/1/2014 times \$25.00.

*Schedule SB, Part V — Summary of Plan Provisions***EARLY RETIREMENT**

- **Eligibility** Eligible on or after age 55 and 15 years of vesting service.
- **Benefit** Amount equal to the normal retirement benefit, based on service at termination reduced by 0.6% for each month commencement precedes normal retirement. Kansas City employees who had attained age 50 and had five years of service as of October 1, 1996 have benefits reduced for early retirement based on the following table:

<u>Retirement Age</u>	<u>Reduction Factor</u>
64	3%
63	5
62	9
61	13
60	17
59	30
58	35
57	40
56	45
55	50

LATE RETIREMENT

- **Eligibility** Eligible after the normal retirement date.
- **Benefit** Greater of the normal retirement benefit actuarially increased to the earlier of the date the suspension of benefits notice was given and the date of termination, and the benefit at date of termination.

*Schedule SB, Part V — Summary of Plan Provisions***DEFERRED VESTED**

- Eligibility Eligible on or after five years of vesting service.
- Benefit Amount equal to the normal retirement benefit using the credited service and dollar amounts at date of termination, with payments commencing at age 65. May commence as early as age 55 if 15 years of vesting service, with a reduction for early retirement (as shown above).

DISABILITY

- Eligibility Eligible on or after age 40 and 15 years of vesting service.
- Benefit Amount equal to the normal retirement benefit accrued to date of disability, commencing immediately, offset by other disability benefits payable to the participant.

PRE-RETIREMENT DEATH

- Eligibility Eligible on or after five years of vesting service.
- Benefit Amount equal to 50% of the benefit the participant would have received had he retired under a 50% joint and survivor annuity on the first of the month following his death, or his earliest commencement age, if not yet eligible.

FORM OF BENEFITS

- Automatic form for unmarried participants Life annuity.
- Automatic form for married participants 50% Joint & Survivor.
- Optional forms Life annuity, 50% Joint & Survivor, 66 2/3% Joint & Survivor, 75% Joint & Survivor, 100% Joint & Survivor.

**OPTIONAL FORM OF
CONVERSION FACTORS**

UP84 mortality and 7% interest.

MISCELLANEOUS

- Maximum benefits Annual benefits may not exceed the limits in IRC Section 415. This limit is indexed annually. For 2017, the limit is \$215,000.

*Schedule SB, Part V — Summary of Plan Provisions***Benefits Included or Excluded**

Unless noted below, all benefits provided by the plan are included in this valuation.

- **Plan amendments excluded:** None.
- **Late retirement increases:**
 - *Active participants:* The plan provides benefit suspension notices to participants who work beyond normal retirement; therefore, late retirement actuarial increases only apply to participants who defer retirement beyond age 70½.
 - *Deferred vested participants:* Current deferred vested participants over normal retirement age are valued including the late retirement actuarial increase.
- **Internal Revenue Code limitations:** The limitations of Internal Revenue Code Section 415(b) and 401(a)(17) have been incorporated into our calculations.
- **IRC Section 416 rules for top-heavy plans:** We did not test whether this plan is top-heavy (when the present value of benefits for key employees equals or exceeds 60% of the present value for all participants). However, we expect that the plan is not top-heavy due to the large number of rank-and-file participants; therefore, the funding target and target normal cost do not reflect any liability for top-heavy benefit accruals.

Schedule SB, Part V — Summary of Plan Provisions

PLAN PROVISIONS SPECIFIC TO FUNDING

Additional Benefits Included or Excluded• **IRC Section 436 benefit restrictions:**

- *Unpredictable contingent event benefits:* See below.
- *Plan amendments:* See above.
- *Prohibited payments:* Limitations on prohibited benefits (if any) are reflected for annuity starting dates before the valuation date but are ignored for annuity starting dates on or after the valuation date.
- *Benefit accruals:* The plan's funding target does not reflect any limitation on benefit accruals. The target normal cost does not reflect any limitation on benefit accruals.

- **Scheduled benefit increases:** Scheduled benefit increases effective after the end of the current plan year are excluded from minimum funding requirements.
- **Unpredictable contingent event benefits:** The plan does not have any unpredictable contingent event benefits.

PLAN PROVISION CHANGES SINCE PRIOR VALUATION

- IRC 415(b) maximum benefit was updated from 2016 to 2017.

Schedule SB, line 24 — Change in Actuarial Assumptions

ACTUARIAL ASSUMPTION CHANGES SINCE PRIOR VALUATION

Funding

- The expected investment return on assets was changed from 4.28% to 4.11%.
- The administrative expense load was changed from \$145,000 to \$151,000.

Schedule SB, line 26 — Schedule of Active Participant Data

ATTAINED AGE	YEARS OF CREDITED SERVICE										TOTAL
	UNDER 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & UP	
Under 25		4									4
25-29		4	7								11
30-34		6	9	3							18
35-39		5	9	5	5	2					26
40-44		1	10	2	7	6	1				27
45-49		3	8	6	10	11	9				47
50-54		5	12	6	15	3	4	1	1		47
55-59		4	8	5	33	2	3		13		68
60-64		1	7	5	29		2		14	7	65
65-69			1		8						9
70 & up			1		2						3
Total		33	72	32	109	24	19	1	28	7	325

In each cell, the number is the count of active participants for each age/service combination.

Schedule SB, line 32 — Schedule of Amortization Bases

The total shortfall amortization charge is the sum of the individual shortfall amortization installment for each plan year since the IRC Section 430 changes made by the Pension Protection Act of 2006 (PPA) took effect for the plan. Although an individual shortfall amortization installment can be negative, the combined shortfall amortization charge cannot be less than \$0.

SHORTFALL BASES					
YEAR ESTABLISHED		OUTSTANDING BALANCE	YEARS REMAINING		2017 INSTALLMENT
2015	\$	873,251	5	\$	189,169
2016	\$	322,929	6		60,097
2017		(140,248)	7		(23,030)
Total	\$	1,055,932		\$	226,236

Form 5500Department of the Treasury
Internal Revenue ServiceDepartment of Labor
Employee Benefits Security
Administration

Pension Benefit Guaranty Corporation

Annual Return/Report of Employee Benefit Plan

This form is required to be filed for employee benefit plans under sections 104 and 4065 of the Employee Retirement Income Security Act of 1974 (ERISA) and sections 6057(b) and 6058(a) of the Internal Revenue Code (the Code).

▶ **Complete all entries in accordance with the instructions to the Form 5500.**OMB Nos. 1210-0110
1210-0089**2017****This Form is Open to Public Inspection****Part I Annual Report Identification Information**For calendar plan year 2017 or fiscal plan year beginning 01/01/2017 and ending 12/31/2017

- A** This return/report is for: ☐ a multiemployer plan ☐ a multiple-employer plan (Filers checking this box must attach a list of participating employer information in accordance with the form instructions.)
☒ a single-employer plan ☐ a DFE (specify) _____
- B** This return/report is: ☐ the first return/report ☐ the final return/report
☐ an amended return/report ☐ a short plan year return/report (less than 12 months)
- C** If the plan is a collectively-bargained plan, check here: ☒
- D** Check box if filing under: ☒ Form 5558 ☐ automatic extension ☐ the DFVC program
☐ special extension (enter description) _____

Part II Basic Plan Information—enter all requested information

1a Name of plan Pentair Pump Group, Inc. Bargaining Unit Employees Pension Plan	1b Three-digit plan number (PN) ▶ <u>002</u>
	1c Effective date of plan <u>04/01/1954</u>
2a Plan sponsor's name (employer, if for a single-employer plan) Mailing address (include room, apt., suite no. and street, or P.O. Box) City or town, state or province, country, and ZIP or foreign postal code (if foreign, see instructions) Pentair Flow Technologies, LLC C/O Pentair, Inc. 5500 Wayzata Boulevard, Suite 800 Golden Valley MN 55416-1261	2b Employer Identification Number (EIN) <u>41-1881858</u> 2c Plan Sponsor's telephone number <u>(763) 545-1730</u> 2d Business code (see instructions) <u>333200</u>

Caution: A penalty for the late or incomplete filing of this return/report will be assessed unless reasonable cause is established.

Under penalties of perjury and other penalties set forth in the instructions, I declare that I have examined this return/report, including accompanying schedules, statements and attachments, as well as the electronic version of this return/report, and to the best of my knowledge and belief, it is true, correct, and complete.

SIGN HERE		<u>9-27-18</u>	Diana Solomon, Sr. Dir Glo Benefits
	Signature of plan administrator	Date	Enter name of individual signing as plan administrator
SIGN HERE			Mark C. Borin, CFO
	Signature of employer/plan sponsor	Date	Enter name of individual signing as employer or plan sponsor
SIGN HERE			
	Signature of DFE	Date	Enter name of individual signing as DFE

For Paperwork Reduction Act Notice, see the Instructions for Form 5500.

Form 5500 (2017)
v. 170203

3a Plan administrator's name and address ☒ Same as Plan Sponsor	3b Administrator's EIN 3c Administrator's telephone number
4 If the name and/or EIN of the plan sponsor or the plan name has changed since the last return/report filed for this plan, enter the plan sponsor's name, EIN, the plan name and the plan number from the last return/report: a Sponsor's name c Plan Name	4b EIN 4d PN
5 Total number of participants at the beginning of the plan year	5 549
6 Number of participants as of the end of the plan year unless otherwise stated (welfare plans complete only lines 6a(1) , 6a(2) , 6b , 6c , and 6d).	
a(1) Total number of active participants at the beginning of the plan year	6a(1) 325
a(2) Total number of active participants at the end of the plan year	6a(2) 301
b Retired or separated participants receiving benefits.....	6b 82
c Other retired or separated participants entitled to future benefits	6c 148
d Subtotal. Add lines 6a(2) , 6b , and 6c	6d 531
e Deceased participants whose beneficiaries are receiving or are entitled to receive benefits.	6e 19
f Total. Add lines 6d and 6e	6f 550
g Number of participants with account balances as of the end of the plan year (only defined contribution plans complete this item)	6g
h Number of participants who terminated employment during the plan year with accrued benefits that were less than 100% vested	6h 7
7 Enter the total number of employers obligated to contribute to the plan (only multiemployer plans complete this item).....	7

8a If the plan provides pension benefits, enter the applicable pension feature codes from the List of Plan Characteristics Codes in the instructions:

1B 3H

b If the plan provides welfare benefits, enter the applicable welfare feature codes from the List of Plan Characteristics Codes in the instructions:

9a Plan funding arrangement (check all that apply)	9b Plan benefit arrangement (check all that apply)
(1) ☐ Insurance	(1) ☐ Insurance
(2) ☐ Code section 412(e)(3) insurance contracts	(2) ☐ Code section 412(e)(3) insurance contracts
(3) ☒ Trust	(3) ☒ Trust
(4) ☐ General assets of the sponsor	(4) ☐ General assets of the sponsor

10 Check all applicable boxes in 10a and 10b to indicate which schedules are attached, and, where indicated, enter the number attached. (See instructions)

a Pension Schedules

- (1)** ☒ **R** (Retirement Plan Information)
- (2)** ☐ **MB** (Multiemployer Defined Benefit Plan and Certain Money Purchase Plan Actuarial Information) - signed by the plan actuary
- (3)** ☒ **SB** (Single-Employer Defined Benefit Plan Actuarial Information) - signed by the plan actuary

b General Schedules

- (1)** ☒ **H** (Financial Information)
- (2)** ☐ **I** (Financial Information - Small Plan)
- (3)** ☐ **A** (Insurance Information)
- (4)** ☒ **C** (Service Provider Information)
- (5)** ☒ **D** (DFE/Participating Plan Information)
- (6)** ☐ **G** (Financial Transaction Schedules)