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FINAL REPORT

Report ID : 298842

Report Information

Submitting Organisation :	00121312 : Arad Ltd
Account :	142320 : Arad Ltd
AWQC Reference :	142320-2020-CSR-2 : Prod Test: PD 3/4" Q3 = 4 140, 152, 154 Water Meter
Project Reference :	PT-4368
Product Designation :	PD 3/4" Q3 = 4 Water Meter Type
Composition of Product :	Polyamide Polymer Body (see attachments for composition of materials).
Product Manufacturer :	Arad Ltd., Kibbutz Dalia, ISRAEL.
Use of Product :	In-Line/Plastic Body Water Meter.
Sample Selection:	As provided by the submitting organisation.
Testing Requested :	**AS/NZS 4020 TESTING OF PRODUCTS FOR USE IN CONTACT WITH DRINKING WATER**
Product Type :	Composite
Samples :	Samples were prepared and controlled as described in Appendix A of AS/NZS 4020:2018
Extracts :	Extracts were prepared as described in Appendix/Clause C, D, E, F, G, H, 6.8.
Project Completion Date :	18-Dec-2020
Project Comment :	The results presented herein demonstrate compliance of PD 3/4" Q3 = 4 Water Meter Type to AS/NZS 4020 when tested at the 'in-the-product' exposure with a 0.1 scaling factor at 20°C ± 2°C.

THE RESULTS STATED IN THIS REPORT RELATE TO THE SAMPLE OF THE PRODUCT SUBMITTED FOR TESTING. ANY CHANGES IN THE MATERIAL FORMULATION, PROCESS OF MANUFACTURE, THE METHOD OF APPLICATION, OR THE SURFACE AREA-TO-VOLUME RATIO IN THE END USE, COULD AFFECT THE SUITABILITY OF THE PRODUCT FOR USE IN CONTACT WITH DRINKING WATER

Michael Glasson
APPROVED SIGNATORY

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Summary of Results

APPENDIX/CLAUSE	RESULTS
C – Taste	Passed at the in-the-product exposure with a scaling factor of 0.1 applied.
D – Appearance	Passed at the in-the-product exposure with a scaling factor of 0.1 applied.
E – Growth of Aquatic Micro-organisms	Passed when tested at the in-use exposure.
F – Cytotoxic Activity	Passed at the in-the-product exposure with a scaling factor of 0.1 applied.
G – Mutagenic Activity	Passed at the in-the-product exposure with a scaling factor of 0.1 applied.
H – Metals	Passed at the in-the-product exposure with a scaling factor of 0.1 applied.
6.8 – Organic Compounds	Passed at the in-the-product exposure with a scaling factor of 0.1 applied.

Test Methods

Test(s) in Appendix	AWQC Test Method	Reference Method
C	T0320-01	AS/NZS 4020:2018
D	TO029-01 & TO018-01	APHA 2120c & APHA 2130b
E	TO014-03	APHA 4500 O G
F	TM-001	AS/NZS 4020:2018
G	TM-002	AS/NZS 4020:2018
H	TIC-006	EPA 200.8

Organic Test Methods

Test(s) in Clause	Test Method	Reference Method
Clause 6.8	TMZ-M36	USEPA524.2
	EP239	USEPA521
	EP132-LL	USEPA_SW846-8270D
	EP075C	USEPA_SW846-8270D
	EP075ASIM	USEPA_SW846-8270D

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Summary Comment : Not applicable.

CLAUSE 6.2 Taste

Sample Description	The meter was tested at the in-the-product exposure. Each meter held approximately 210 mL of water. Extracts were prepared using 1000 mL volumes of 50 mg/L hardness water.
Extraction Temperature	20°C ± 2°C.
Test Method	Taste (Appendix C)
Test Information	
Scaling Factor	A scaling factor of 0.1 was applied.
Results	Not detected.
Evaluation	The product passed the requirements of clause 6.2 when tested at the in-the-product exposure with a scaling factor of 0.1 applied.
Number of Samples	2.
Test Comment	Not applicable.

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CLAUSE 6.3 Appearance

Sample Description The meter was tested at the in-the-product exposure. Each meter held approximately 210 mL of water. Extracts were prepared using 1000 mL volumes of 50 mg/L hardness water.

Extraction Temperature 20°C ± 2°C.

Test Method Appearance (Appendix D)

Scaling Factor A scaling factor of 0.1 was applied.

Results

	Test (- Blank)	Maximum Allowed	Units
Colour	<1	5	HU
Turbidity	<0.1	0.5	NTU

Evaluation The product passed the requirements of clause 6.3 when tested at the in-the-product exposure with a scaling factor of 0.1 applied.

Number of Samples 1.

Test Comment Not applicable.

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CLAUSE 6.4 Growth of Aquatic Micro-organisms

Sample Description The non-metallic components were immersed at the in-use exposure. The surface area was in the range 1000 mm2 per Litre and 15,000 mm2 per Litre. Extracts were prepared using 1000 mL volumes of test water.

Test Method Growth of Aquatic Micro-organisms (Appendix E)

Inoculum The volume of the inoculum was 600 mL

Scaling Factor Not applicable.

Results

Mean Dissolved Oxygen	Control	7.5	mg/L
Mean Dissolved Oxygen Difference	Positive Reference	5.7	mg/L
	Negative Reference	0.3	mg/L
	Test	0.60	mg/L

Evaluation The product passed the requirements of clause 6.4 when tested at the in-use exposure.

Number of Samples 1.

Test Comment Not applicable.

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CLAUSE 6.5 Cytotoxic Activity

Sample Description	The meter was tested at the in-the-product exposure. Each meter held approximately 210 mL of water. Extracts were prepared using 1000 mL volumes of 50 mg/L hardness water.
Extraction Temperature	20°C ± 2°C.
Test Method	Cytotoxic Activity (Appendix F)
Scaling Factor	A scaling factor of 0.1 was applied.
Results	Non-cytotoxic.
Evaluation	The product passed the requirements of clause 6.5 when tested at the in-the-product exposure with a scaling factor of 0.1 applied.
Number of Samples	1.
Test Comment	The test extracts and blank extracts were used to prepare nutrient growth medium and subsequently used to grow a cell line (ATCC Number CCL 81) in the analysis. In addition zinc sulphate (0.4 mmol) was used for the positive control in the analysis.

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CLAUSE 6.6 Mutagenic Activity

Sample Description The meter was tested at the in-the-product exposure. Each meter held approximately 210 mL of water. Extracts were prepared using 1000 mL volumes of 50 mg/L hardness water.

Extraction Temperature 20°C ± 2°C.

Test Method Mutagenic Activity (Appendix G)

Scaling Factor A scaling factor of 0.1 was applied.

Results

Bacteria Strain	S9	Number of Revertants per Plate: Blank	Sample Extract	Positive Controls	
Salmonella typhimurium TA98	-	29, 26, 29	18, 30, 19	3894, 4301, 4158	NPD (20µg)
Mean ± Standard deviation		28.0 ± 1.7	22.3 ± 6.7	4117.7 ± 206.5	
	+	39, 41, 28	34, 37, 33	3243, 3764, 3081	2-AF (20µg)
Mean ± Standard deviation		36.0 ± 7.0	34.7 ± 2.1	3362.7 ± 356.9	
Salmonella typhimurium TA102	-	404, 475, 455	446, 455, 457	3466, 2473, 2518	Mitomycin C(10µg)
Mean ± Standard deviation		444.7 ± 36.6	452.7 ± 5.9	2819.0 ± 560.8	
	+	572, 584, 584	511, 412, 517	2029, 1856, 2071	
Mean ± Standard deviation		580.0 ± 6.9	480.0 ± 59.0	1985.3 ± 114.0	

Comments S9 was used as the metabolic activator. NPD (4-nitro-o-phenylenediamine) and Mitomycin C are specific positive controls for strains TA98 - and TA102 (- and +) respectively, while 2-AF (2-aminofluorene) when used in conjunction with S9 is a positive control for TA98+.

Evaluation The product passed the requirements of clause 6.6 when tested at the in-the-product exposure with a scaling factor of 0.1 applied.

Number of Samples 1.

Test Comment Not applicable.

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CLAUSE 6.7 Metals

Sample Description
The meter was tested at the in-the-product exposure. Each meter held approximately 210 mL of water. Extracts were prepared using 1000 mL volumes of 50 mg/L hardness water.

Extraction Temperature
20°C ± 2°C.

Test Method
Metals (Appendix H)

Scaling Factor
A scaling factor of 0.1 was applied.

Method of Analysis
All methods used to determine concentrations of metals are based on those described in the US EPA method 200.8 Determination of Trace elements in Waters and Wastes by Inductively Coupled Plasma - Mass Spectrometry. The methods have been adapted for the instrumentation in use at the Australian Water Quality Centre.
Concentration of the metals described in Table 2 of the AS/NZS 4020:2018 are determined as follows:
Aluminium, Antimony, Arsenic, Barium, Boron, Cadmium, Chromium, Copper, Iron, Lead, Manganese, Mercury, Molybdenum, Nickel, Selenium and Silver by Inductively Coupled Plasma Mass Spectrometry.

Results

	Limit of Reporting mg/L	Blank mg/L	Test 1 mg/L	Test 2 mg/L	Max Allowed mg/L
Final Extract					
Aluminium	0.001	0.008	0.008	0.008	0.2
Antimony	0.0005	<0.0005	<0.0005	<0.0005	0.003
Arsenic	0.0003	<0.0003	<0.0003	<0.0003	0.01
Barium	0.0005	<0.0005	0.0008	0.0006	0.7
Boron	0.020	<0.020	<0.020	<0.020	1.4
Cadmium	0.0001	<0.0001	<0.0001	<0.0001	0.002
Chromium	0.0001	<0.0001	<0.0001	<0.0001	0.05
Copper	0.0001	<0.0001	0.0002	0.0002	2.0
Iron	0.0005	<0.0005	<0.0005	<0.0005	0.3
Lead	0.0001	<0.0001	<0.0001	<0.0001	0.01
Manganese	0.0001	<0.0001	<0.0001	<0.0001	0.1
Mercury	0.00003	<0.00003	<0.00003	<0.00003	0.001
Molybdenum	0.0001	<0.0001	<0.0001	<0.0001	0.05
Nickel	0.0001	<0.0001	<0.0001	<0.0001	0.02
Selenium	0.0001	<0.0001	<0.0001	<0.0001	0.01
Silver	0.00003	<0.00003	<0.00003	<0.00003	0.1

Evaluation
The product passed the requirements of clause 6.7 when tested at the in-the-product exposure with a scaling factor of 0.1 applied.

Number of Samples
1.

Test Comment
Not applicable.

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CLAUSE 6.8 Organic Compounds

Sample Description The meter was tested at the in-the-product exposure. Each meter held approximately 210 mL of water. Extracts were prepared using 1000 mL volumes of 50 mg/L hardness water.

Extraction Temperature 20°C ± 2°C.

Test Method Organic Compounds (Clause 6.8). Max Allowed values are taken from the Australian Drinking Water Guidelines and Drinking-water Standards for New Zealand. Please note, some reported compounds have no guideline value.

Scaling Factor A scaling factor of 0.1 wa

Results

Organic Compound Nitrosamines	Blank µg/L	Test µg/L	Max Allowed
!External Lab Report No.	ES2032950	ES2032950	
1-Nitrosopiperidine (NPip)	<0.003	<0.003	
1-Nitrosopyrrolidine (NPyr)	<0.01	<0.01	
Nitrosomorpholine (NMor)	<0.003	<0.003	
N-Nitrosodiethylamine (NDEA)	<0.01	<0.01	
N-Nitrosodimethylamine (NDMA)	0.004	<0.003	0.1 µg/L
N-Nitrosodi-n-propylamine (NDPA)	<0.003	<0.003	
N-Nitrosomethylethylamine (NMEA)	<0.003	<0.003	

Organic Compound Phenols	Blank µg/L	Test µg/L	Max Allowed
!External Lab Report No.	ES2032950	ES2032950	
2 4 5-trichlorophenol	<1.0	<1.0	
2 4 6-trichlorophenol	<1.0	<1.0	20 µg/L
2 4-dichlorophenol	<1.0	<1.0	200 µg/L
2 4-dimethylphenol	<1.0	<1.0	
2 6-dichlorophenol	<1.0	<1.0	
2-chlorophenol	<1.0	<1.0	300 µg/L
2-nitrophenol	<1.0	<1.0	
4-chloro-3-methylphenol	<1.0	<1.0	
m+p cresol	<2.0	<2.0	
o-cresol	<1.0	<1.0	
pentachlorophenol	<2.0	<2.0	9 µg/L
phenol	<1.0	<1.0	

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Organic Compound Phthalate Esters	Blank µg/L	Test µg/L	Max Allowed
!External Lab Report No.	ES2032950	ES2032950	
Bis(2-ethylhexyl) phthalate	<10	<10	10 µg/L
Butyl benzyl phthalate	<2	<2	
Di(2-ethylhexyl) adipate	<2	<2	
Diethyl phthalate	<2	<2	
Dimethyl phthalate	<2	<2	
Di-n-butyl phthalate	<2	<2	
Di-n-octyl phthalate	<2	<2	

Organic Compound Polycyclic Aromatic Hydrocarbons	Blank µg/L	Test µg/L	Max Allowed
!External Lab Report No.	ES2032950	ES2032950	
Acenaphthene	<0.02	<0.02	
Acenaphthylene	<0.02	<0.02	
Anthracene	<0.02	<0.02	
Benzo(a)anthracene	<0.02	<0.02	
Benzo(a)pyrene	<0.005	<0.005	0.01 µg/L
Benzo(a)pyrene TEQ	<0.005	<0.005	
Benzo(b+j)fluoranthene	<0.02	<0.02	
Benzo(ghi)perylene	<0.02	<0.02	
Benzo(k)fluoranthene	<0.02	<0.02	
Chrysene	<0.02	<0.02	
Dibenzo(a-h)anthracene	<0.02	<0.02	
Fluoranthene	<0.02	<0.02	
Fluorene	<0.02	<0.02	
Indeno(123-cd)pyrene	<0.02	<0.02	
Naphthalene	<0.02	<0.02	
PAH - Total	<0.005	<0.005	
Phenanthrene	<0.02	<0.02	
Pyrene	<0.02	<0.02	

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Organic Compound **Volatile Organic Compounds GCMS**	Blank µg/L	Test µg/L	Max Allowed
1 1 1 2-Tetrachloroethane	<1	<1	
1 1 1-Trichloroethane	<1	<1	
1 1 2 2-Tetrachloroethane	<1	<1	
1 1 2-Trichloroethane	<1	<1	
1 1-Dichloropropene	<1	<1	
1 2 3-Trichlorobenzene	<1	<1	
1 2 3-Trichloropropane	<1	<1	
1 2 4-Trichlorobenzene	<1	<1	
1 2 4-Trimethylbenzene	<1	<1	
1 2-Dibromo-3-chloropropane	<1	<1	1 µg/L
1 2-Dibromoethane	<1	<1	1 µg/L
1 2-Dichlorobenzene	<1	<1	1500 µg/L
1 2-Dichloroethane	<1	<1	3 µg/L
1 2-Dichloropropane	<1	<1	
1 3 5-Trimethylbenzene	<1	<1	
1 3-Dichlorobenzene	<1	<1	
1 3-Dichloropropane	<1	<1	
1 4-Dichlorobenzene	<1	<1	40 µg/L
1,1-Dichloroethane	<1	<1	
1,1-Dichloroethene	<1	<1	30 µg/L
2,2-Dichloropropane	<1	<1	
2-Chlorotoluene	<1	<1	
4-Chlorotoluene	<1	<1	
4-Isopropyltoluene	<1	<1	
Benzene	<1	<1	1 µg/L
Bromobenzene	<1	<1	
Bromochloromethane	<1	<1	
Bromodichloromethane	<1	<1	60 µg/L
Bromoform	<1	<1	100 µg/L
Bromomethane	<4	<4	
Carbon tetrachloride	<1	<1	3 µg/L
Chlorobenzene	<1	<1	300 µg/L
Chloroethane	<4	<4	
Chloroform	<1	<1	400 µg/L
Chloromethane	<4	<4	
cis-1 3-Dichloropropene	<1	<1	
cis-1,2-Dichloroethene	<1	<1	
Dibromochloromethane	<1	<1	150 µg/L
Dibromomethane	<1	<1	
Dichlorodifluoromethane	<1	<1	
Dichloromethane	<4	<4	4 µg/L
Ethylbenzene	<1	<1	300 µg/L
Hexachlorobutadiene	<0.7	<0.7	0.7 µg/L
Isopropylbenzene	<1	<1	
m+p-Xylenes - Total	<2	<2	

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Organic Compound **Volatile Organic Compounds GCMS**	Blank µg/L	Test µg/L	Max Allowed
Naphthalene	<1	<1	
n-Butylbenzene	<1	<1	
n-Propylbenzene	<1	<1	
o-Xylene	<1	<1	
sec-Butylbenzene	<1	<1	
Styrene	<1	<1	30 µg/L
tert-Butylbenzene	<1	<1	
Tetrachloroethene	<1	<1	50 µg/L
Toluene	<1	<1	800 µg/L
Total 1 2-dichloroethene	<2	<2	60 µg/L
Total 1 3-dichloropropene	<2	<2	20 µg/L
Total Trichlorobenzene	<2	<2	30 µg/L
Total Xylene	<3	<3	600 µg/L
trans-1 3-Dichloropropene	<1	<1	
trans-1,2-Dichloroethene	<1	<1	
Trichloroethene	<1	<1	
Trichlorofluoromethane	<1	<1	
Trihalomethanes - Total	<4	<4	250 µg/L
Vinyl chloride	<0.3	<0.3	0.3 µg/L

Evaluation The product passed the requirements of clause 6.8 when tested at the in-the-product exposure with a scaling factor of 0.1 applied.

Number of Samples 1.

Test Comment Not applicable.

Qiong Huang

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Item No.	Cat. No	Raw Material Cat No.	Description	QTY	Material Generic Name	Supplier (Manufacturer)	Commercial Name	Wet area (dm^2)	Total surface area (dm^2)	WRAS Approval	NSF Approval	NSF DCC Project	NSF DCC Part	ACS Approval	Supplier/Manufacturer Contact Person Name	Supplier/Manufacturer Contact Person e-mail	Supplier/Manufacturer Contact Person Fax No.	Remarks	REV.
		11255753AS4020	PD20 3/4" Q3=4 140,152,154 w/o register		Range Bodies: 140; 152; 154														
		11255707	PD20 140 3/4 Q3=4 w/o register B be				Included Water Volume for 140 Body Length Is:	0.292 (L)											
1	20613010		O-ring ID-64 W-1.5 EPDM 70	1	EPDM	Techno-Ad (Xiamen Meifeng Seal Products Co Ltd)	7026-0076 (EP7115F)	485	970	1007531	Yes			13 MAT LY 070	Anna Ochakovsky	anna@techno-ad.co.il	+972-3-5503488		
2	20660100		O-ring ID-80 W-3 EPDM 70	1	EPDM	Techno-Ad (Xiamen Meifeng Seal Products Co Ltd)	7016-1984 (EP7115F)	1.229	2.458	1007531	Yes			13 MAT LY 070	Anna Ochakovsky	anna@techno-ad.co.il	+972-3-5503488		
3	20660340		O-ring ID-67 W-3.5 SI 50 GWA	1	SIL500BF	Techno-Ad (Xiamen Meifeng Seal Products Co Ltd)	7015-3637 (SIL500BF)	1.477	2.954	1304515	Yes				Anna Ochakovsky	anna@techno-ad.co.il	+972-3-5503488		
4	22161000		Wave spring ring PD20 Q3=4	1	AISI 316	[illegible] Spring Washers	R00728/12004571 (AISI 316)	1.159	1.159						Gaelle Tetzer	sales@[illegible].com	+33(0)4 74 48 31 36		
5	23162320	29460000	Measuring chamber adjusting ring PD20 3/4 Q=4	1	PBT nat	Polyram Ram-On Industries	RAMSTER PF100NT	6.762	6.762	1508504			PM04402	in process	Yaara Avrahami	yaara@polyram.co.il	+972-4-6599000		
6	24630809	29460000	Adaptor PD20 3/4 Q=4 IN LINE	1	PBT nat	Polyram Ram-On Industries	RAMSTER PF100NT	18.642	18.642	1508504			PM04402	in process	Yaara Avrahami	yaara@polyram.co.il	+972-4-6599000		
7	25289930	29127009EM	Cover PD20 3/4 Q=4 GV-4 FWA IN LINE	1	PA*+40%GF	AIT Chemicals LTD (EMS-Grivory)	GRIVORY GV-4 FWA BLACK 9225	8.100	54.101	1012501	Yes			10 MAT LI 050	Shai Zemanek	shai@ait-chemicals.com	+972 (0) 9 8911805		
8	25444100		Basket strainer PD 3/4 JANZ	1	POM (C9021 nat.)	JANZ COF	Filter for volumetric chamber Q3=4 JANZ Ref. [illegible]	9.500	3.500	1012506					Luis Bras	lbras@cof.janz.pt	+351-218096421		
9	31132630	29127009EM	Body IN LINE PD20 140 Q=4 GV-4 FWA for NRV AU	1	PA*+40%GF	AIT Chemicals LTD (EMS-Grivory)	GRIVORY GV-4 FWA BLACK 9225	26.598	71.098	1012501	Yes			10 MAT LI 050	Shai Zemanek	shai@ait-chemicals.com	+972 (0) 9 8911805		
10	54301169		Measuring chamber PD 3/4 Q=4 B	1	ASSEMBLY	JANZ COF	Complete Vol. Chamber JV400 Ref. Item [illegible]	20.429	20.429						Luis Bras	lbras@cof.janz.pt	+351-218096421		
								94.481	167.586										
		11255717	PD20 152 BSP 3/4 Q=4 w/o register B be				Included Water Volume for 0 Body Length is:	0.296 (L)											
9.a	31136939	29127009EM	Body IN LINE PD20 3/4 152 BSP Q=4 GV-4 FWA for NRV	1	PA*+40%GF	AIT Chemicals LTD (EMS-Grivory)	GRIVORY GV-4 FWA BLACK 9225	27.730	74.310	1012501	Yes			10 MAT LI 050	Shai Zemanek	shai@ait-chemicals.com	+972 (0) 9 8911805		
11	57603609		Check valve OF20-DN20	2	ASSEMBLY	NEOPERL	Check valve OF20-DN20	3.408	xxx	1404804	Yes			14 ACC NY 306	Nina Moroso	Nina.Moroso@neoperl.com	+39-0322-863267		
								95.513	170.858										
		11255727	PD20 154 BSP 3/4 Q=4 w/o register B be				Included Water Volume for 0 Body Length is:	0.298 (L)											
9.b	31136939	29127009EM	Body IN LINE PD20 3/4 154 BSP Q=4 GV-4 FWA for NRV	1	PA*+40%GF	AIT Chemicals LTD (EMS-Grivory)	GRIVORY GV-4 FWA BLACK 9225	27.620	74.686	1012501	Yes			10 MAT LI 050	Shai Zemanek	shai@ait-chemicals.com	+972 (0) 9 8911805		
11	57603609		Check valve OF20-DN20	2	ASSEMBLY	NEOPERL	Check valve OF20-DN20	3.408	xxx	1404804	Yes			14 ACC NY 306	Nina Moroso	Nina.Moroso@neoperl.com	+39-0322-863267		

Last Approval Date:	06/07/2020
Rev:	01
Current State:	Approved For Production
Designed	Ulyana B
Designed Date	12/08/2015
Checked	Ofer C
Checked Date	19/08/2015
Approved	Ofer C
Approved Date	19/08/2015
Drawing Catalog No.	

Rev 01 Deleting item no 11 from SKU 11255707
Add item no 57603609 to SKU 11255717 and 11255727

Australian Water Quality Centre

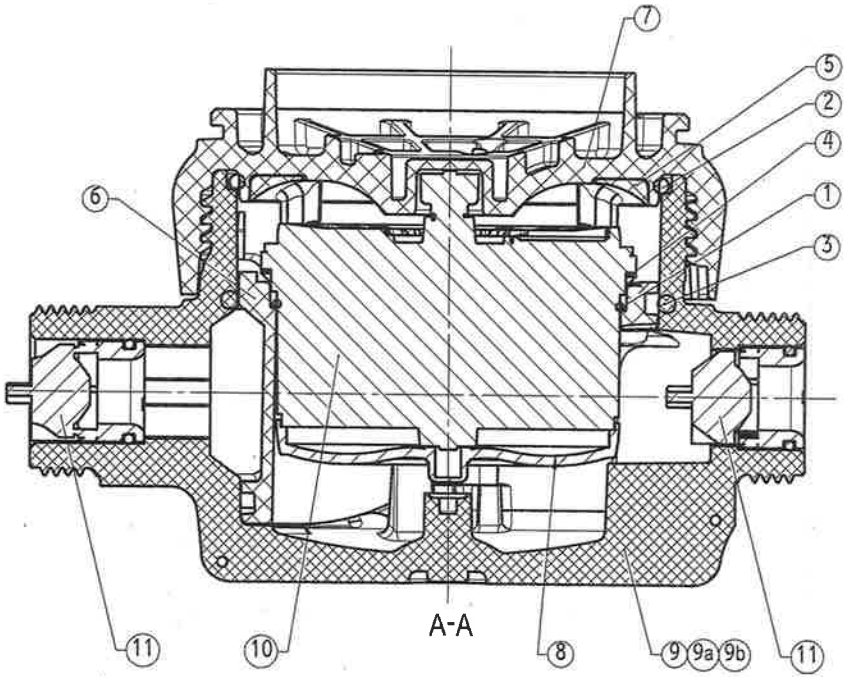
Report Number: 298842

Date: 21/12/2020

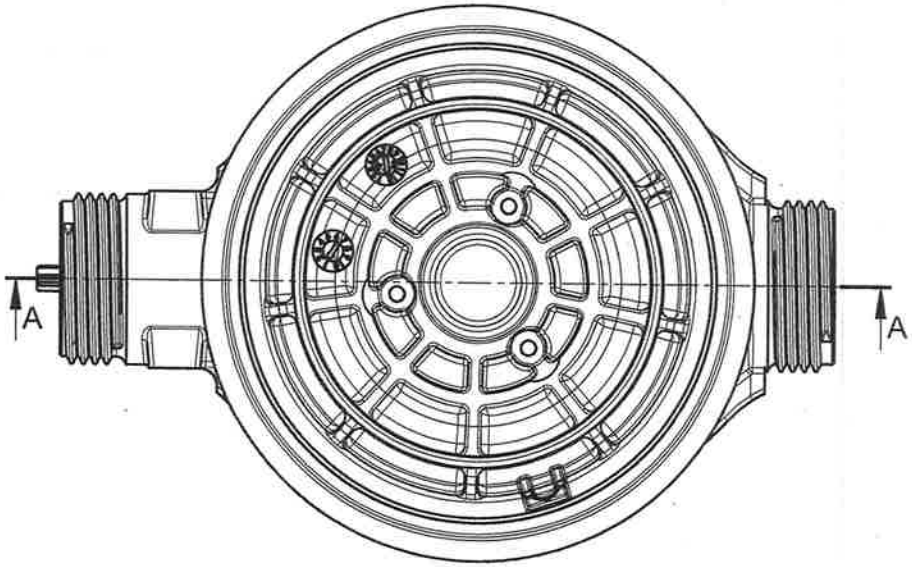
Document reviewed by: MICHAEL GLASSON

Signature: M Glasson

REV.	DESCRIPTION	REFERENCE	DATE	APPROVED
01	Deleting item no 11 from SKU 11255707 Add item no 57603809 to SKU 11255717, and 11255727	A20000259	19/07/2020	Moshik A.



Item No.	Cat. No.	Description	QTY	Remarks	REV.
		PD20 3/4" Q3=4 140,152,154 w/o register			
	11255707	**PD20 140 3/4 Q3=4 w/o register B bs**			
1	20613010	O-ring ID-64 W-1.5 EPDM 70	1		
2	20660109	O-ring ID-80 W-3 EPDM 70	1		
3	20660340	O-ring ID-82 W-3.5 S 50 DWA	1		
4	23161609	Wave spring ring PD20 Q3=4	1		
5	23162309	Measuring chamber adjusting ring PD20 3/4 Q=4	1		
6	24630809	Adaptor PD20 3/4 Q=4 INLINE	1		
7	25285939	Cover PD20 3/4 Q=4 GV-4 FWA INLINE	1		
8	25444109	Basket strainer PD 3/4 JANZ	1		
9	31137639	Body INLINE PD20 140 Q=4 GV-4 FWA for NRV AU	1		
10	54301189	Measuring chamber PD 3/4 Q=4 B	1		
	11255717	**PD20 152 BSP 3/4 Q=4 w/o register B bs**			
9.a	31136839	Body INLINE PD20 3/4 152 BSP Q=4 GV-4 FWA for NRV	1		
11	57603809	Check valve OF20-DN20	2		01
	11255727	**PD20 154 BSP 3/4 Q=4 w/o register B bs**			
9.b	31136939	Body INLINE PD20 3/4 154 BSP Q=4 GV-4 FWA for NRV	1		
11	57603809	Cheeck valve OF20-DN20	2		01



ARAD Water Measuring Technologies
ENGINEERING DEPARTMENT
Approved For Production
Approved By: Yoel B.M
Date: 20/07/2020

WEIGHT [g] :

MATERIAL [generic name] :

	NAME	DATE
DRAWN	Yana	02/09/2015
DESIGNED	Gary W	02/09/2015
CHECKED	Gary W	02/09/2015
APPROVED	Ofer C	02/09/2015

NAME
PD20 3/4 Q3=4 140,152,154 w/o register
FOR DRINKING WATER APPROVAL

PROD.PROC. ASS'Y

A3

TOLERANCE	0.5-6	6-30	30-120	120-400	400-1000	ANGULAR
ISO 2768	±0.1	±0.2	±0.3	±0.5	±0.8	±30'

SHEET 1 OF 1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS

DR 1

CAT.NO./ REV: 11255755AS4020 /01

SCALE 1:1 ( )

ARAD Water Measuring Technologies

Dwg: D:\AradVault\Domestic\PD_PD_INLINE ROW-ISO\INLINE POLYMER\PD20 INLINE Q4\11255755AS4020_PD20 3^4 Q3=4 140,152,154 w^o register
Model: D:\AradVault\Domestic\PD_PD_INLINE ROW-ISO\INLINE POLYMER\PD20 INLINE Q4\11255717_PD20 152 BSP 3^4 Q=4 w^o register B bs
Model Rev: 00

A B C D E F G H J K L M N P Q R S T U V W X Y Z