

Product Environmental Profile

Wired motor for outdoor, indoor blinds and rolling shutters LS40



Reference product



> Reference product

LS 40 9/18 US 2M 120V - UNIT

Ref 1023322

> Functional unit

"To ensure the closing and opening action by performing 14 000 operating cycles, on a reference service life of 15 years, with a torque of 9 N.m, on a length of 2 meters, corresponding to 16 winding turns per half cycle with a tube diameter of 40 mm."

The functional unit is defined by the PSR and meets specific standards.
The lifetime reference has no link with the guarantee of the product.

> References covered

LS 40 3/30 VVFO,5M HIR CRO&WHE1020131
LS 40 3/30 VVF 2,5M - BAR 1020150
LS 40 3/30 VVF 2,5M - UNIT 1020147
LS 40 3/30 VVF 2,5M - BAR 1020151
LS 40 3/30 VVF 2,5M - BAR 1020152
LS 40 3/30 RRF 6,5M - UNIT 1020145
LS 40 3/30 VVF 2,5M + SQ BAR 1020141
LS 40 4/16 WITH SQUARE - BAR 1020142
LS 40 9/16 WITH SQUARE - BAR 1020143
LS 40 13/10 WITH SQUARE - BAR 1020137
LS 40 3/30 VVF 2,5M - P100 1020146
LS 40 4/16 RRF 1M - IN BULK 1021396
LS 40 4/16 RRF 6,5M - BAR 1021384
LS 40 4/16 RRF 6,5M - BULK 1021382
LS 40 4/16 VVF 2,5M - BAR 1021387
LS 40 4/16 VVF 2,5M - UNIT 1021383
LS 40 4/16 VVF 2,5M - IN BULK 1021395

LS 40 4/16 RRF0,5M + HIR - BAR 1021352
LS 40 4/16 RRF 1M - BAR 1021388
LS 40 9/16 RRF 1M - IN BULK 1023339
LS 40 9/16 RRF 3M - IN BULK 1023338
LS 40 9/16 VVF 2,5M - BAR 1023336
LS 40 9/16 VVF 2,5M - UNIT 1023329
LS 40 9/16 VVF 2,5M - BAR 1023337
LS 40 9/16 VVF 2,5M - IN BULK 1023342
LS 40 9/16 VVF 3M - BAR 1023334
LS 40 9/16 RRF 6,5M - IN BULK 1023346
LS 40 9/16 VR VVF 2,5M - BAR 1023324
LS 40 9/16 RRF 1M - BAR 1023332
LS 40 9/16 VVF 2,5M ADAPT50 UNI 1023301
LS 40 9/16 RRF 3M - BAR 1023333
LS 40 9/16 RRF 6,5M - BAR 1023331
LS 40 9/16 VVF 3M - PACK 100 1023325
LS 40 13/10 RRF 1M - UNIT 1024188

LS 40 13/10 RRF 1M - IN BULK 1024193
LS 40 13/10 VVF 2,5M - BAR 1024186
LS 40 13/10 VVF 2,5M - BAR 1024187
LS 40 13/10 VVF 2,5M - UNIT 1024185
LS 40 13/10 VVF 2,5M - IN BULK 1024195
LS 40 13/10 VR VVF 2,5M - BAR 1024181
LS 40 13/10 RRF 1M - BAR 1024190
LS 40 3/30 VVF2,5M BAR 1020161
LS 40 3/30 RRF 1M - BULK 1020148
LS 40 3/30 RRF 1M - BAR 1020149
LS 40 3/30 VVF 2,5M S2I - UNIT 1020129
LS 40 3/30 VVF 2,5M ARAB UNIT 1020136
LS 40 S 4/16 VVF 2,5M - UNIT 1021376
LS 40 4/16 RRF 2,5M - UNIT 1021381
LS 40 4/16 RRF 3M - BAR 1021389
LS 40 4/16 RRF 3M - IN BULK 1021393
LS 40 4/16 VVF 10M - BAR 1021386
LS 40 SHORT 4/16 RRF 3M - BULK 1021398
LS 40 SHORT 4/16 VVF 2,5M BAR 1021371
LS 40 SHORT 4/16 VVF 2,5M BULK 1021365
LS 40 SHORT 4/16 VVF 2,5M BAR 1021372
LS 40 4/16 LT50 VVF2,5M - UNIT 1021363
LS 40 SHORT 4/16 SEMI EQUIP LT 1021349
LS 40 S 4/16 HIRSCH. BLACK SW 1021400
LS 40 S 4/16 HIRSCH. GREY SW 1021402

LS 40 S 4/16 RRF 3M - BAR 1021385
LS 40 SHORT 4/16 VVF 2,5M BAR 1021373
LS 40 S 4/16 VVF 2,5M S2I UNIT 1021351
LS 40 9/16 HIR BLUE 230V - BAR 1023312
LS 40 9/16 HIR BLACK 230V BULK 1023311
LS 40 9/16 RRF 2,5M - UNIT 1023328
LS 40 9/16 VVF 2,5M S2I - UNIT 1023300
LS 40 9/16 HIR BLUE 230V P100 1023320
LS 40 9/16 VVF 2,5M ARAB UNIT 1023317
LS 40 13/10 RRF 3M - IN BULK 1024194
LS 40 13/10 RRF 3M - UNIT 1024189
LS 40 13/10 VVF 3M - BAR 1024191
LS 40 13/10 RRF 6,5M - BULK 1024183
LS 40 13/10 RRF 10M BAR 1024200
LS 40 9/16 RRF 10M BAR 1023350
LS 40 S 4/16 RRF 3M - PACK 100 1021457
LS 40 4/16 RRF0,5M HIRS -P100 1021458
LS 40 9/16 RRF0,5M HIRS -P100 1023384
409R2 9/18 US 2M 120V - UNIT 1023322
404R2 4/18 CL.1 US 2M 120V UNI 1021340
412R2 12/10 CL.1 US 2M - UNIT 1024192
404S2 LS 4/36 0,5M CL.1 - UNIT 1020123
404S2 LS 4/36 2M CL.1 - UNIT 1020140
404S2 LS 4/36 CL1 0,5M - UNIT 1021369
407R3 7/16 1M - UNIT 1023335

403S3 LS 3/30-36 1M JAPAN UNIT 1020118
404R6 4/18 VVF 2,5M SASO D36 1021375
409R6 9/18 VVF 2,5M - BAR 1023330
409R6 9/18 VVF 2,5M SASO D36 1023323
404R6 4/18 VVF 2,5M - UNIT 1021380
403S6 LS 3/30 VVF 2,5M - UNIT 1020132
403S6 LS 3/30 VVF2,5M SASO UNI 1020120
403S6 LS 3/30 VVF2,5M SASO WAR 1020121
403S6 LS 3/30 VVF2,5M SASO D36 1020119
SOLUS 40 6/14 VVF2,5M - P100 1023321
SCR UP40 4,5/30 RRF1M HD -P100 1021344
SCR UP40 4,5/30 RRF0,3M HIR HD 1021339
SCREEN UP40 4,5/30 VVF2,5M BAR 1021347
SCR UP40 4,5/30 VVF 6,5M P50 1021412
SCR UP40 4,5/30 VVF 10M P50 1021413
SCREEN40 UP 4,5/30 VVF2,5M6,5M 1021449
SCREEN40 UP 4,5/30 VVF6,5M-10M 1021450
SCREEN40 UP 4,5/30 RRF0,5M HIR 1021451
SCREEN40 UP 4,5/30 VVF2,5M BUL 1021452
SCREEN JOB40 5/16 RRF1M P100 1021370
SCR JOB40 5/16 RRF0,3M HIR SQ 1021335
SCR JOB40 5/16 RRF1M SAV UNIT 1021356
SCREEN JOB40 5/16 RRF 0,5M HIR 1021338
SCREEN JOB40 5/16 RRF1M SQ 1021378
SCREEN JOB40 5/16 VVF 3M P100 1021390



Materials and substances

All useful measures have been adopted to ensure that the materials used in the composition of the product do not contain any substances banned by the legislation in force at the time of marketing.

Plastics			Metals			Other		
	g	%		g	%		g	%
Silicon	154,0	9,28	Steel	707,5	42,63	Lubricant	25,0	1,51
PA66	123,0	7,41	Copper	139,6	8,41	Others	3,3	0,20
GF	71,8	4,33	Zamak	49,6	2,99	Packaging		
POM	58,2	3,51	Alu	26,3	1,58	Cardboard	72,8	4,39
PVC	40,0	2,41	Alloy	23,1	1,39	Paper	92,1	5,55
Thermoset	22,7	1,37	Others	5,19	0,31			
PET	12,6	0,76						
Others	34,4	2,07						

Total mass of reference product: 1659,56 g

Estimated recyclable content: 25,4 %

> CHEMICAL SUBSTANCES

The products covered by this PEP comply with REACH regulation and RoHS directive.



— Manufacturing

> The devices covered in this PEP are manufactured in a production that have adopted environmental management approach.

> Energy model

Polish mix



— Distribution

The packaging is 100% recyclable. Paper is 100% recycled fibers and cardboard is minimum 50% recycled fibers. Packaging is continuously improved by reducing the amount and using a maximum of recycled material. Different sorts of packaging exist for this range : unit, by 5 or by 100. For the modelisation, unit pack is the reference.



— Installation

> Installation elements

There is no installation element required for that range of products.

> Installation processes

There is no installation process.

> Energy model

No



— Use

> For the considered scenario, the product has a power of 126 W in active mode during 0.31% of the time.
This corresponds to an energy consumption of 52.02 kWh for the lifetime of 15 years.

> Energy model of the usage phase: Europe mix

> Consumables and maintenance: None



— End of life

> Typical transport conditions

Considering the complexity and the lack of knowledge of the electric and electronic recycling channel and processes all around the world, we considered a 1000 km transport of the product at the end of life and a landfill treatment.

> Energy model

European mix



— Environmental impacts

Evaluation of the environmental impact covers the following life cycle stages: manufacturing, distribution, installation, usage and end of life. All calculations are done with EIME software version EIME© v5.7.0.3

Product Environmental Profile

Wired motor for outdoor, indoor blinds and rolling shutters LS40



Indicators	Global	Unit	Manufacturing	Distribution	Installation	Usage	End of Life
Acidification potential of soil and water	1,52E-01	kg SO ₂ eq	3,20E-02	1,40E-02	7,74E-05	1,05E-01	5,16E-04
Abiotic depletion (elements, ultimate reserves)	3,00E-04	kg antimony eq	2,98E-04	1,79E-08	9,18E-10	2,18E-06	7,02E-09
Abiotic depletion (fossil fuels)	3,83E+02	MJ	8,92E+01	6,29E+00	2,31E-01	2,85E+02	1,78E+00
Air pollution	2,70E+03	m ³	1,54E+03	6,78E+01	2,92E+00	1,08E+03	1,17E+01
Eutrophication	1,34E-02	kg(PO ₄) ³ -eq	4,68E-03	1,38E-03	2,69E-04	6,33E-03	7,17E-04
Global Warming	3,45E+01	kg CO ₂ eq	8,49E+00	4,95E-01	1,89E-01	2,51E+01	1,29E-01
Ozone layer depletion	3,63E-06	CFC-11 eq	1,99E-06	8,48E-10	5,57E-10	1,64E-06	2,19E-09
Photochemical oxidation	9,42E-03	kg C ₂ H ₄ eq	2,88E-03	6,95E-04	4,46E-05	5,76E-03	3,95E-05
Water pollution	2,64E+03	m ³	1,50E+03	7,36E+01	7,20E+00	1,04E+03	1,63E+01
Total Primary Energy	6,86E+02	MJ	1,75E+02	6,33E+00	1,94E-01	5,02E+02	1,50E+00
Total use of renewable primary energy resources	6,92E+01	MJ	5,32E+00	8,08E-03	3,30E-03	6,39E+01	2,34E-02
Total use of non-renewable primary energy resources	6,17E+02	MJ	1,70E+02	6,32E+00	1,91E-01	4,38E+02	1,48E+00
Use of renewable primary energy excluding renewable primary energy used as raw material	6,90E+01	MJ	5,09E+00	8,08E-03	3,30E-03	6,39E+01	2,34E-02
Use of renewable primary energy resources used as raw material	2,37E-01	MJ	2,37E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of non renewable primary energy excluding non renewable primary energy used as raw material	6,04E+02	MJ	1,58E+02	6,32E+00	1,91E-01	4,38E+02	1,48E+00
Use of non renewable primary energy resources used as raw material	1,21E+01	MJ	1,21E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of non renewable secondary fuels	0,00E+00	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of renewable secondary fuels	0,00E+00	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of secondary material	4,53E-01	kg	4,53E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Net use of fresh water	9,16E+01	m ³	4,43E-01	3,82E-05	3,06E-05	9,12E+01	7,75E-05
Hazardous waste disposed	1,58E+01	kg	1,58E+01	0,00E+00	1,28E-04	1,31E-02	3,65E-04
Non hazardous waste disposed	1,02E+02	kg	6,11E+00	1,52E-02	1,83E-01	9,38E+01	1,57E+00
Radioactive waste disposed	6,48E-02	kg	2,11E-03	1,06E-05	3,96E-06	6,26E-02	2,74E-05
Components for reuse	0,00E+00	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for recycling	0,00E+00	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for energy recovery	0,00E+00	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy	6,33E-02	MJ	1,05E-02	0,00E+00	5,28E-02	0,00E+00	0,00E+00

Product Environmental Profile

Wired motor for outdoor, indoor blinds and rolling shutters LS40



> These environmental impacts are only applicable to the reference product mentioned on page 1. To cover all the «covered references» mentioned on page 1, a calculation by an extrapolation coefficient is required.

> Extrapolation rule

An extrapolation rule is made for the use, depending on the couple.

	Manufacturing	Distribution	Installation	Use	End of life	Application example: Global sum for Global Warming indicator (kg CO ₂ eq)
LS 40 (9 Nm)	1	1	1	1,0	1	3,45E+01
LS 40 (13 Nm)	1	1	1	1,61	1	4,97E+01
LS 40 (12 Nm)	1	1	1	1,84	1	5,55E+01
LS 40 (7 Nm)	1	1	1	0,9	1	3,18E+01
LS 40 (6 Nm)	1	1	1	0,92	1	3,25E+01
LS 40 (5 Nm)	1	1	1	0,81	1	2,96E+01
LS 40 (4,5 Nm)	1	1	1	0,54	1	2,28E+01
LS 40 (4 Nm)	1	1	1	0,81	1	2,97E+01
LS 40 (3 Nm)	1	1	1	0,44	1	2,03E+01

Registration number : SOMF-00025-V01.03-EN	Applicable PCR: PCR-ed3-EN-2015 04 02 Supplemented by PSR-0006-ed2-EN-2016 03 29
Accreditation number: VH18	Programme information: www.pep-ecopassport.org
Edition date: 07-2018	Period of validity: 5 years
Independent verification of the declaration and data, according to ISO 14025 : 2010 Internal <input type="checkbox"/> External <input checked="" type="checkbox"/> Bureau Veritas LCIE	
Document in compliance with ISO 14025:2010: Environmental labels and declarations. Type III environmental declarations.	
PCR review was conducted by a panel of experts chaired by Philippe Osset (SOLINNEN)	
The elements of the present PEP cannot be compared with elements from another programme.	
Somfy contact: Justine ZAWADA, Sustainable Development Engineer, justine.zawada@somfy.com	