



60TH ANNIVERSARY 1959-2019

SPAL

AUTOMOTIVE

E-FANS

Intelligent solutions for electric mobility cooling

Subsidiaries | Filiali

SPAL USA
www.spalusa.com
info@spalusa.com

SPAL DO BRASIL
www.spalbrasil.com
info@spalbrasil.com

SPAL RUS LLC
www.spalrus.com
info@spalrus.com

**PEE AAR AUTOMOTIVE
TECHNOLOGIES LTD.**
info@peeaaarexim.com

KOREA
oem@spal.com

SPAL CHINA
www.spal-china.com
sales@spal-china.com

SPAL AUTOMOTIVE UK
www.spalautomotive.co.uk
sales@spalautomotive.co.uk

SPAL JAPAN K.K.
www.spalautomotive.com
oem@spal.com

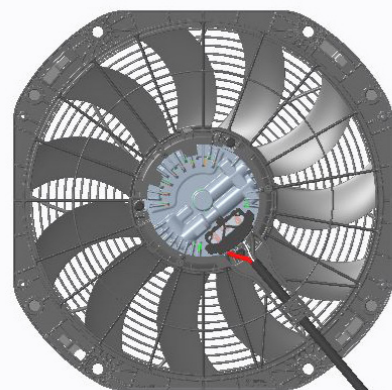
GERMANY
oem@spal.com

SPAL provides a wide range of high performance brushless fans and blowers, specially designed to meet new generation cooling systems requirements for automotive industry.

- Sealed Motor IP6k9k
- High efficiency
- Spark free (brushless products)
- Extended temperature range
- Intelligent Drive

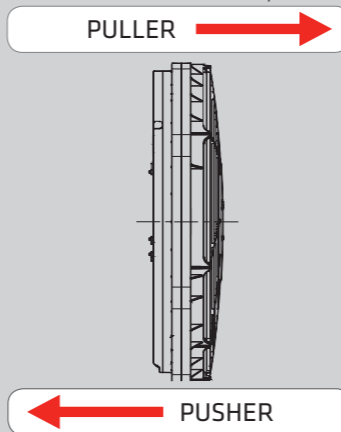
12V

VA164-ABL805HT/R-116A

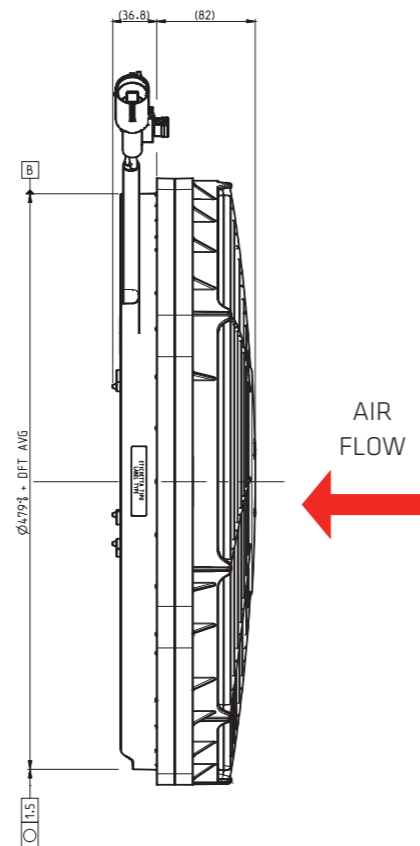
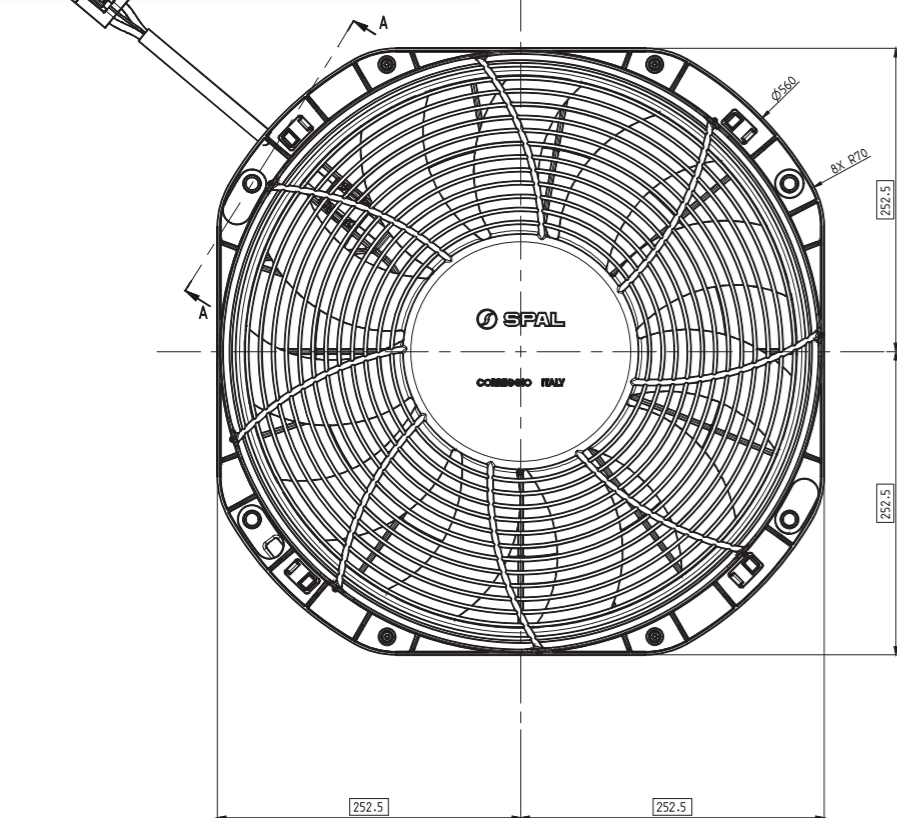


IP Class	IP68 - IP6K9K
Test Voltage	13V dc
Working Temperature	-40°C + 120° C
Mounting torque	15 Nm (+1/-0) with screw M8

Possible Installation layout

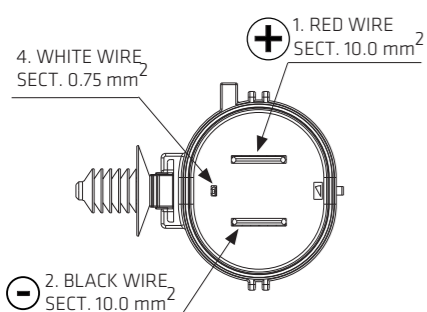


SENSO ROTAZIONE FAN ROTATION



All measurements are expressed in mm

Connector : YAZAKI YPT HYBRID (USCAR-2 compliant) - Part number: 7286-1398-10



Identification	+D	-D	-	PWM* / E*
Pin number	1	2	-	4
Wire Color	RED	BLACK	-	WHITE
Sealing p/n	7158-3713-70	7158-3713-70	-	7158-3031-90
Pin p/n	7114-5623-02	7114-5623-02	-	7114-4103-02
Section [mm²]	10.0	10.0	-	0.75

FEATURES

Max fan speed	rpm	2800
Min fan speed	rpm	800
Sound pressure level	dBA	85.5 - at 1 m from the fan module - lateral side
Weight	kg	5.80
Operating supply voltage range	V	9.0 .. 16.0 at the Drive Connector
Supply voltage to reach max speed	V	13.0 .. 16.0 at the Drive Connector
Operating ambient temperature range	°C	-40°C.. + 120°C
Max operating ambient temperature @ max fan speed	°C	+100°C (*)
Storage temperature range	°C	-40°C.. + 125°C
Lifetime	h	up to 40.000 hours depending on mission profile
Time from 0 rpm to max speed	s	15
Load dump protection (Pulse 5b)	V	35 - Pulse peak voltage (U _S *) - ISO16750-2:2010
Reverse polarity protection		ISO 16750-1 functional status class D - device fully functional after the test, after replacing all blown fuse links and after correcting the polarity

Notes (*): Few minutes ambient temperature transients do not engage the derating owing to the thermal inertia of the system. Overloads may anticipate derating.

AXIAL FAN PERFORMANCE CURVE

