



components range
Leading quality engineering!

asa

bl



1980



2013

asa blue efficiency

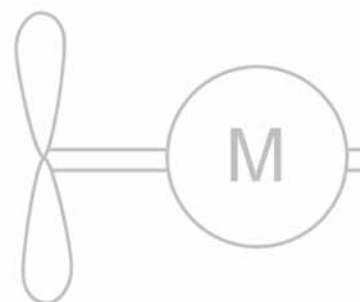
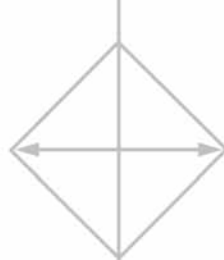
asa blue efficiency stands for developments, advances and innovations already working for our customers' worldwide mobile and stationary applications.

More than 30 years experience in special hydraulic components and heat transfer equipment has made us a global leader in advanced technologies. This experience and progress ensures you competitive pricing, consistent product performance and reliability.

asa's **global capacities** follow worldwide standards, confirmed by successful ISO 9001 quality management and client audits. The modular design and patented solutions of our products offer many advantages for customizing the product to your application.

Over the years, asa continually developed into a globally active systems supplier. Despite this evolution, we consciously maintained the medium sized structure of a family owned company. As a result we are able to respond quickly and flexibly to our customer's demands and promote our innovations. Flexibility, short lead time and quality engineering are our most important advantages.

This catalogue provides a technical overview of our standard products. Please contact us, if more detailed information is required or if you cannot find the optimal product for you.



leading quality engineering



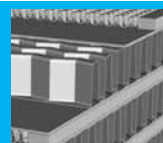
asa hydraulik GmbH, Austria / EU



asa of America, New Jersey / USA



asa hydraulik of Kunshan / CHINA



Use efficiency

asa blue efficiency keeps you 2 steps ahead!

Constant quality through standard parts.

Modular design and patented solutions offer customizing features.

Optimized oil flow on components for better performance and standards.

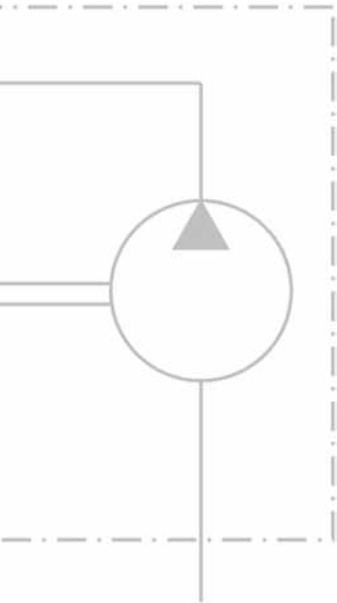
Flexible design on material and function.

Expanded working ranges through new materials.

Value added vibration absorbers offer the capability to resist highest shear loads!

The smallest depth on serial produced standard butterfly flanges.

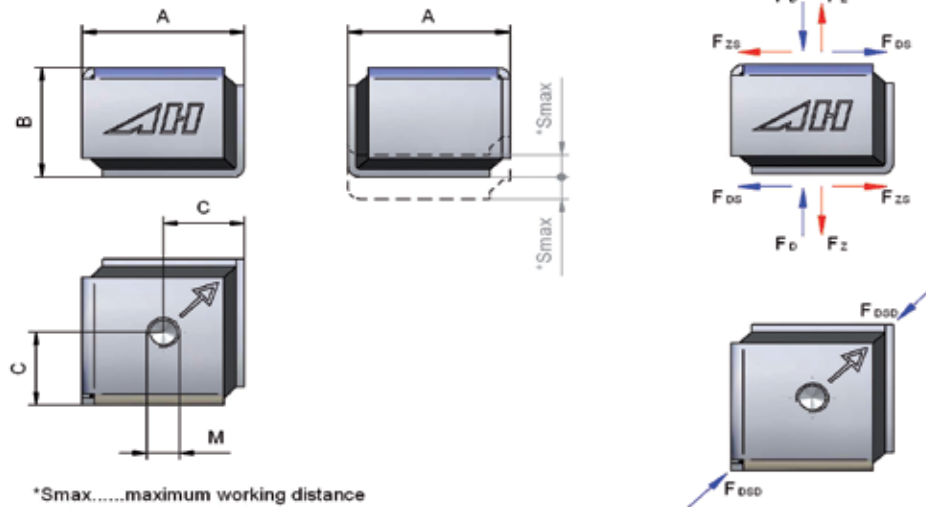
Compactness of serial produced parts as a function of capacity and life time.



Rubber Vibration Absorber

M8, M10, M12 & M16 Threads

The asa vibration absorbers are rubber metal connected parts to absorb impact loads on components to protect them and to extend the life time of the system. The patented solution is especially designed for highest shear loads. An assembly system can be checked by arrows on the metal parts to help to optimize and raise the load capability of the vibration absorber.



Dimensions

description	order number	A	B	C	M	Smax	weight
		[mm]	[mm]	[mm]	[mm]	[mm]	[kg]
40x40x30 M8	MDGQ403008IIK	40	30	20	M8 x 10	± 3	0,127
50x50x45 M10	MDGQ504510IIK	50	45	25	M10 x 12	± 6	0,280
75x75x55 M12	MDGQ755512IIK	75	55	37,5	M12 x 15	± 8	0,659
100x100x75 M16	MDGQ1007516IIK	100	75	50	M16 x 16,5	± 9	1,920

Load Capacities, Maximum Static Loads

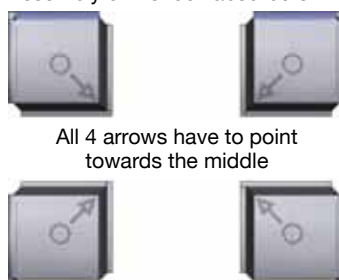
description	order number	compression F_D	tension F_Z	compression/ shear F_{DS}	tension/shear F_{ZS}	compression/ shear diagonal F_{DSO}
		[N]	[N]	[N]	[N]	[N]
40x40x30 M8	MDGQ403008IIK	800	250	700	350	950
50x50x45 M10	MDGQ504510IIK	2000	1450	1550	1500	2250
75x75x55 M12	MDGQ755512IIK	4250	2250	2600	2200	3850
100x100x75 M16	MDGQ1007516IIK	11700	8800	6900	6350	8350

Spring Rates

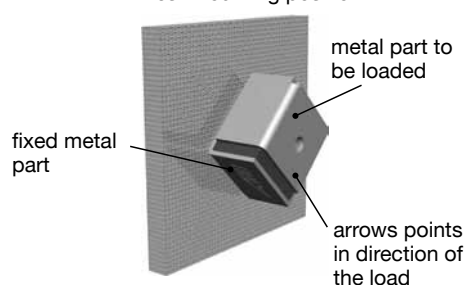
description	order number	compression C_D	tension C_Z	compression/ shear C_{DS}	tension/ shear C_{ZS}	compression/ shear diagonal C_{DSO}
		[N/mm]	[N/mm]	[N/mm]	[N/mm]	[N/mm]
40x40x30 M8	MDGQ403008IIK	267	83	233	117	317
50x50x45 M10	MDGQ504510IIK	333	241	258	250	375
75x75x55 M12	MDGQ755512IIK	531	281	325	275	481
100x100x75 M16	MDGQ1007516IIK	1301	982	770	709	932

Assembly Instructions

Assembly of 4 shock absorbers:



Best mounting position:



Material

metal	zinc coated steel
elastomer	natural rubber
working temperature	-30°C to +80°C

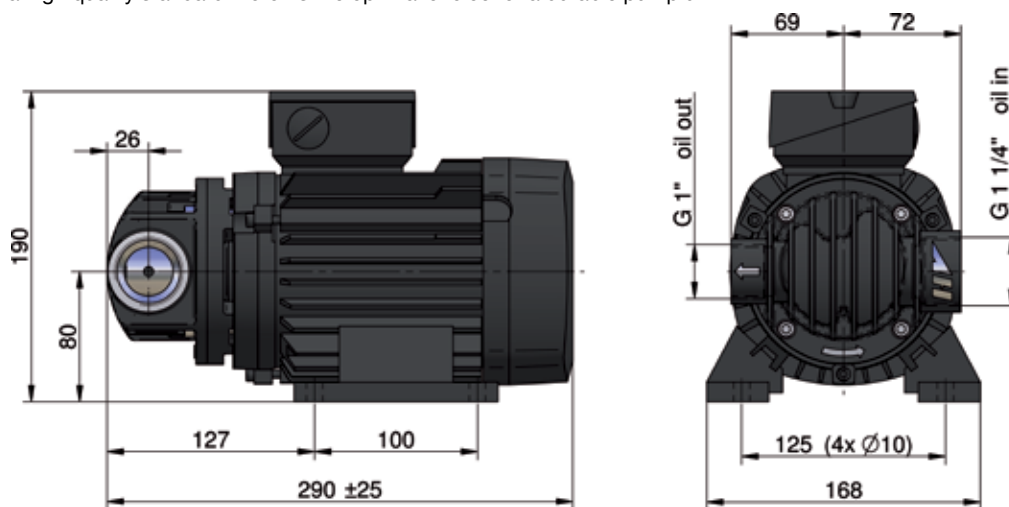
This data sheet shows a technical overview of our products. Please contact us if more exact information is needed. As we are constantly improving our products, their characteristics, dimensions and weights may also change, although we do our best to incorporate these changes continually. The information in this data sheet is intended to be used as a first general guideline only. asa assumes no liability for any information therein, any errors, omissions, misprints, nor any direct or indirect damages, losses or costs resulting therefrom. The cooling performance and the general technical values indicated in this catalogue are measured at a test bench according to asa testing procedures. Because there is no standardized testing procedure, tests used by other manufacturers could have different results. Due to different conditions in testing and application environments the cooling performance may also vary by +/- 15%. Therefore we recommend all coolers to be checked under the system operating conditions. This is also true for vibrations and mechanical stress as well as for pressure peaks and thermal stress and any other relevant factors. Please read manual before installation.

Gerotor Pump Unit

30l/min, 230/400V 50Hz

The asa gerotor pump unit fulfills the requirements of a modern hydraulic system. The compactness of the gerotor pump design saves weight and space. Furthermore the solid shape of the pump has high resistance to hydraulic and mechanic impact loads. The low noise level and easy connection makes this product highly flexible and reliable to various applications.

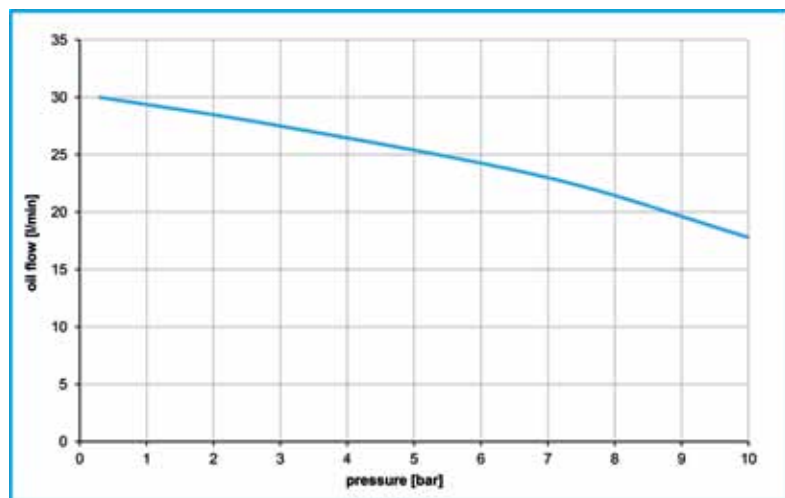
The coupling with a high quality standard motor is the optimal choice for a durable pump unit.



Technical Data

description	order number	motor power	max. oil viscosity	oil flow	neg. pressure	poles	max. current	frequency	weight
		[kW]	[cSt]	[l/min]	[bar]		[A]	[Hz]	[kg]
GERO unit 100	HY0200758G	0,75 / 0,85	100	30	-0,4	4	2,1	50/60	13,8

Pump Characteristic



Material

pump housing	aluminium
gerotor	sintered steel
sealings	NBR

Working Range

ambient temperature	-20°C to +40°C
maximum working pressure	10bar
maximum oil temperature	80°C (100°C on request)
fluids	mineral oils

Options

on request	other voltages
	UL- or CSA approvals
	higher protection level
	250cSt version
	single phase motor

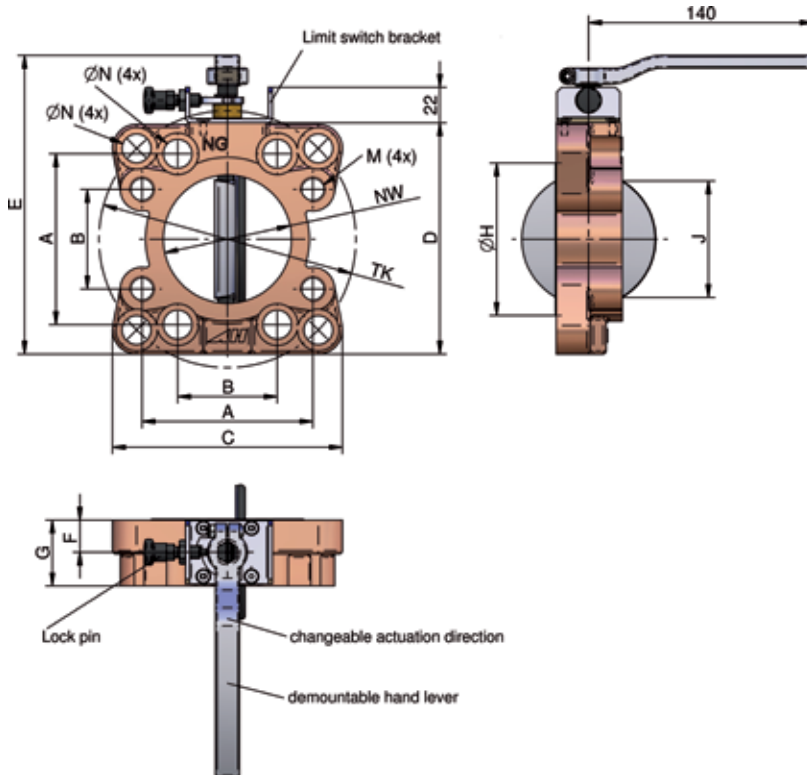
This data sheet shows a technical overview of our products. Please contact us if more exact information is needed. As we are constantly improving our products, their characteristics, dimensions and weights may also change, although we do our best to incorporate these changes continually. The information in this data sheet is intended to be used as a first general guideline only. asa assumes no liability for any information therein, any errors, omissions, misprints, nor any direct or indirect damages, losses or costs resulting therefrom. The cooling performance and the general technical values indicated in this catalogue are measured at a test bench according to asa testing procedures. Because there is no standardized testing procedure, tests used by other manufacturers could have different results. Due to different conditions in testing and application environments the cooling performance may also vary by +/- 15%. Therefore we recommend all coolers to be checked under the system operating conditions. This is also true for vibrations and mechanical stress as well as for pressure peaks and thermal stress and any other relevant factors. Please read manual before installation.

Butterfly flange

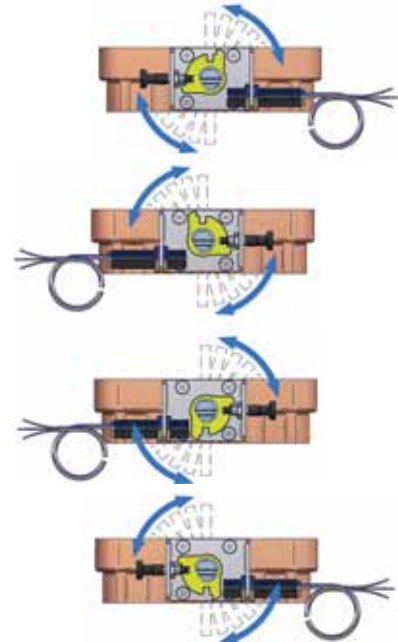
AF-40, AF-50, AF-63, AF-80, AF-100, AF-125

The asa butterfly flange with SAE and DIN connections allows the combination with an elastic element (rubber compensator) to make a short compensating and economical connection with the pump port. The lever position can be changed through our new mechanism.

The handle direction (clockwise or counter clockwise) can be changed by turning the switch bracket. Please note that the butterfly flange may only be opened in mounted state and with greased or lubricated sealing. The adapter flange may only be welded with demounted butterfly flange.



possible valve positions and actuating directions*)



*) ... the shown valve is attached with the optional available inductive limit switch. Please contact us to discover all functions and options.

Technical Data

description	order number	size		A	B	C	D	E	F	G	Ø H	J	M	Ø N	NW	TK	weight
		SAE	DIN	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]		[mm]	[mm]	[mm]	[kg]
AF 40	SDA0040	1 1/2"	40	70	35,7	102	120	162	25	43	60	23,5	M12	13,5	40	110	2,17
AF 50	SDA0050	2"	50	77,8	42,9	111	112	155	20	43	73	35,8	M12	13,5	48	125	2,20
AF 63	SDA0063	2 1/2"	65	89	50,8	111	119	161	20	40	83	55,3	M12	13,5	63	125	2,15
AF 80	SDA0080	3"	80	106,4	62	144	145	187	20	41	95	73,9	M16	18	80	160	2,98
AF 100	SDA0100	4"	100	130	77,8	163	162	205	20	43	123	98,2	M16	18	100	180	4,01
AF 125	SDA0125	5"	125	152,4	92	185	185	227	20	43	148	124,0	M16	18	125	210	4,80

Working Ranges

max. working pressure	7 bar
max. differential pressure	6 bar
temperature range	-20°C to +80°C

Material

housing	GGG 40, cast iron
lever	steel (galvanized)
valve disc	aluminium
seals	NBR

Options

limit switch	mechanical or inductive type
on request	full steel version
on request	Viton seal version

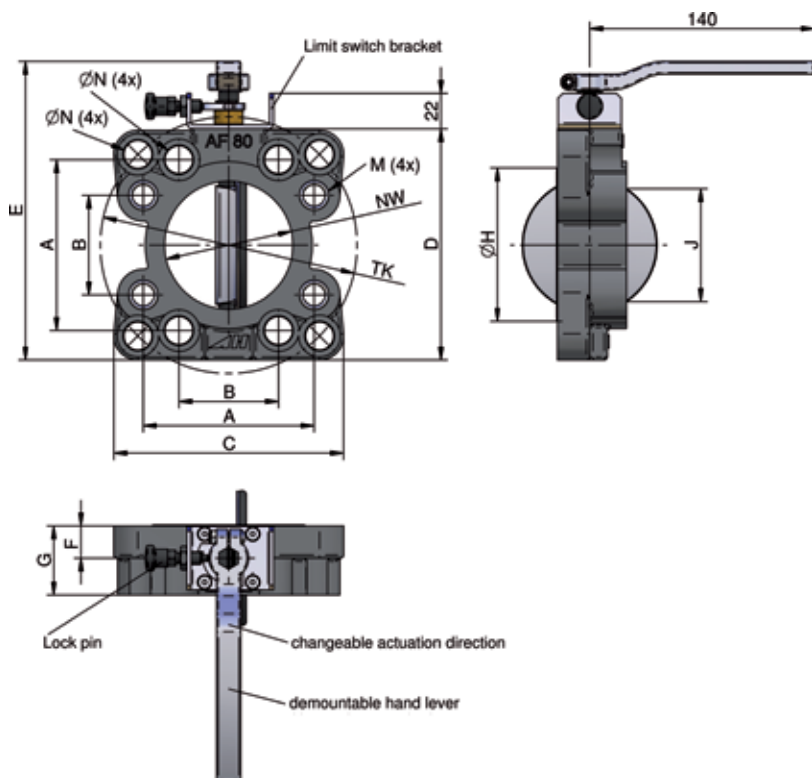


This data sheet shows a technical overview of our products. Please contact us if more exact information is needed. As we are constantly improving our products, their characteristics, dimensions and weights may also change, although we do our best to incorporate these changes continually. The information in this data sheet is intended to be used as a first general guideline only. asa assumes no liability for any information therein, any errors, omissions, misprints, nor any direct or indirect damages, losses or costs resulting therefrom. The cooling performance and the general technical values indicated in this catalogue are measured at a test bench according to asa testing procedures. Because there is no standardized testing procedure, tests used by other manufacturers could have different results. Due to different conditions in testing and application environments the cooling performance may also vary by +/- 15%. Therefore we recommend all coolers to be checked under the system operating conditions. This is also true for vibrations and mechanical stress as well as for pressure peaks and thermal stress and any other relevant factors. Please read manual before installation.

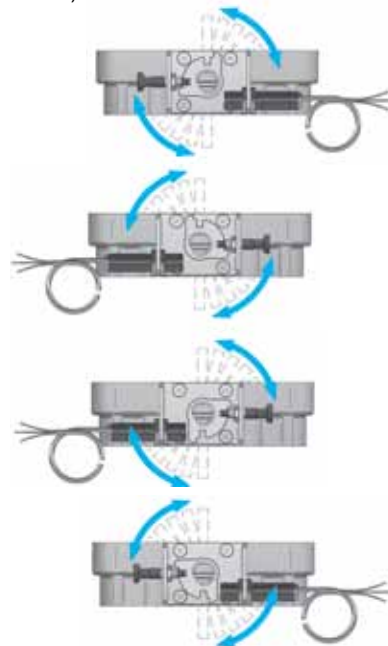
Butterfly flange

AF-50, AF-63 and AF-80 aluminium design

The asa butterfly flanges are now also available with aluminium body. The design is analogous to the standard valves (AF). SAE and DIN connections allow the combination with elastic elements (rubber compensator) to make a short and economical connection with the pump port. The lever position can also be changed through the same mechanism. The handle direction (clockwise or counter clockwise) can be changed by turning the switch bracket. Please note that the butterfly flange may only be opened in mounted state and with greased or lubricated sealing. The adapter flange may only be welded with demounted butterfly flange.



possible valve positions and actuating directions*)



*) ... the shown valve is attached with the optional available inductive limit switch. Please contact us to discover all functions and options.

Technical Data

description	order number	size		A	B	C	D	E	F	G	Ø H	J	M	Ø N	NW	TK	weight
		SAE	DIN	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]		[mm]	[mm]	[mm]	[kg]
AF 50 Alu.	SDA0050A	2"	50	77,8	42,9	112	112	155	20	43	73	35,8	M12	13,5	48	125	1,05
AF 63 Alu.	SDA0063A	2 ½"	65	89	50,8	111	119	161	20	43	83	55,3	M12	13,5	63	125	1,09
AF 80 Alu.	SDA0080A	3"	80	106,4	62	144	145	187	20	43	95	73,9	M16	18	80	160	1,48

Working Ranges

max. working pressure	7 bar
max. differential pressure	6 bar
temperature range	-20°C to +80°C

Material

housing	aluminium
lever	steel (galvanized)
valve disc	aluminium
seals	NBR

Options

limit switch	mechanical or inductive type
on request	Viton seal version



This data sheet shows a technical overview of our products. Please contact us if more exact information is needed. As we are constantly improving our products, their characteristics, dimensions and weights may also change, although we do our best to incorporate these changes continually. The information in this data sheet is intended to be used as a first general guideline only. asa assumes no liability for any information therein, any errors, omissions, misprints, nor any direct or indirect damages, losses or costs resulting therefrom. The cooling performance and the general technical values indicated in this catalogue are measured at a test bench according to asa testing procedures. Because there is no standardized testing procedure, tests used by other manufacturers could have different results. Due to different conditions in testing and application environments the cooling performance may also vary by +/- 15%. Therefore we recommend all coolers to be checked under the system operating conditions. This is also true for vibrations and mechanical stress as well as for pressure peaks and thermal stress and any other relevant factors. Please read manual before installation.

Compensator

Size 1"– 5"

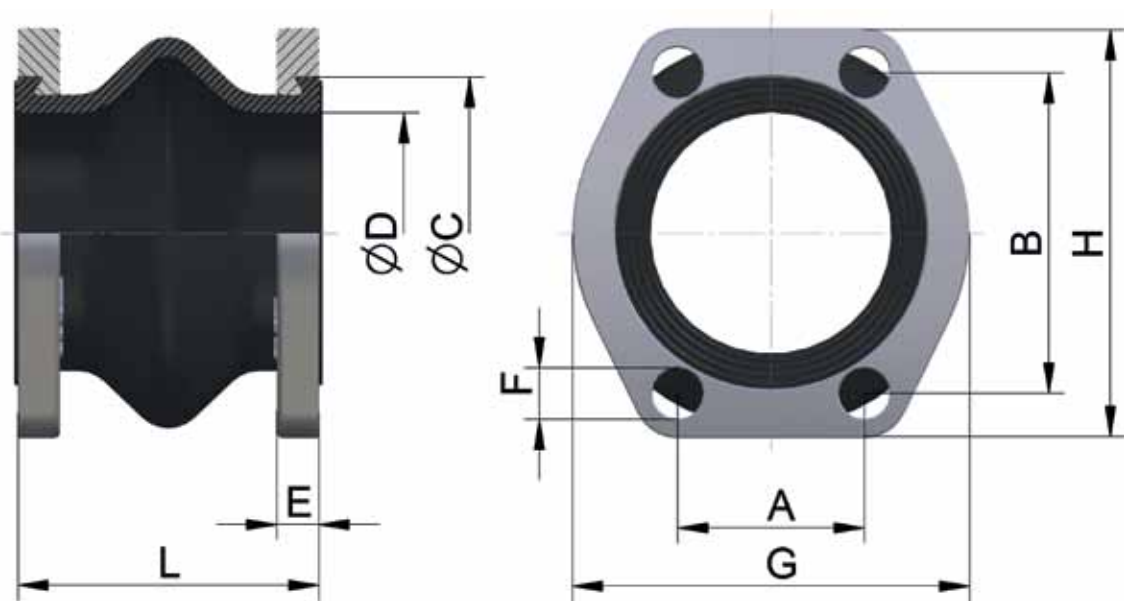
Rubber compensators are elastic connectors with turn able SAE flanges. Compensators are used for damping oscillations, vibrations, noises and movements in axial and transversal direction.

Design

Rubber compensators have a plain surface vulcanized to a fabric body (inside and outside) of the rubber part. The outside is weather resistant and protects the fabric against ageing, wear and corrosion. The interior of the rubber part consists of nitril-butadien-caoutchouc (BUNA-N). Because compensators have tightening lips on both sides, further seals are not necessary.

Operating range for suction and return lines.

All mineral oil products, crude oil, lubrication oil, cooling oil (–20°C/68°F up to 80°C/176°F, intermittent 100°C/212°F), grease, cold water, warm water up to 60°C (140°F), water/oil emulsions, fuel with 30% aromatic content.



description	order number	size		A	B	C	D	E	F	G	H	L	weight
		SAE	NG	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]
K16S – 25	SDKSS025	1"	25	26,2	52,4	43	25	11	11	59	70	65	0,4
K16S – 32	SDKSS032	1 ¼"	32	30,2	58,7	50	32	11	13	73	81	65	0,5
K16S – 40	SDKSS040	1 ½"	40	35,7	70,0	62	40	13	13	83	95	100	0,8
K16S – 50	SDKSS050	2"	50	42,9	77,8	72	48	13	13	97	103	100	1,0
K16S – 63	SDKSS063	2 ½"	63	50,8	89,0	87	63	14	13	109	115	100	1,2
K16S – 80	SDKSS080	3"	80	62,0	106,4	104	80	14	17	131	136	100	1,8
K16S – 90	SDKSS090	3 ½"	90	70,0	120,6	104	80	14	17	140	152	100	1,9
K16S – 100	SDKSS100	4"	100	77,8	130,2	130	100	16	17	152	162	100	2,5
K16S – 125	SDKSS126	5"	125	92,0	152,4	155	125	16	17	165	184	130	3,0

NG* ... nominal size / Nenngröße

Material

inside	NBR
outside	CR
flange	steel (galvanized)

Working Pressure

maximum working pressure	0,2–1,5 bar absolute
--------------------------	----------------------



Please contact us for the maximum movement tolerances of the rubber connection! Note, that dimension and tolerances have to be taken from the corresponding scale drawing.

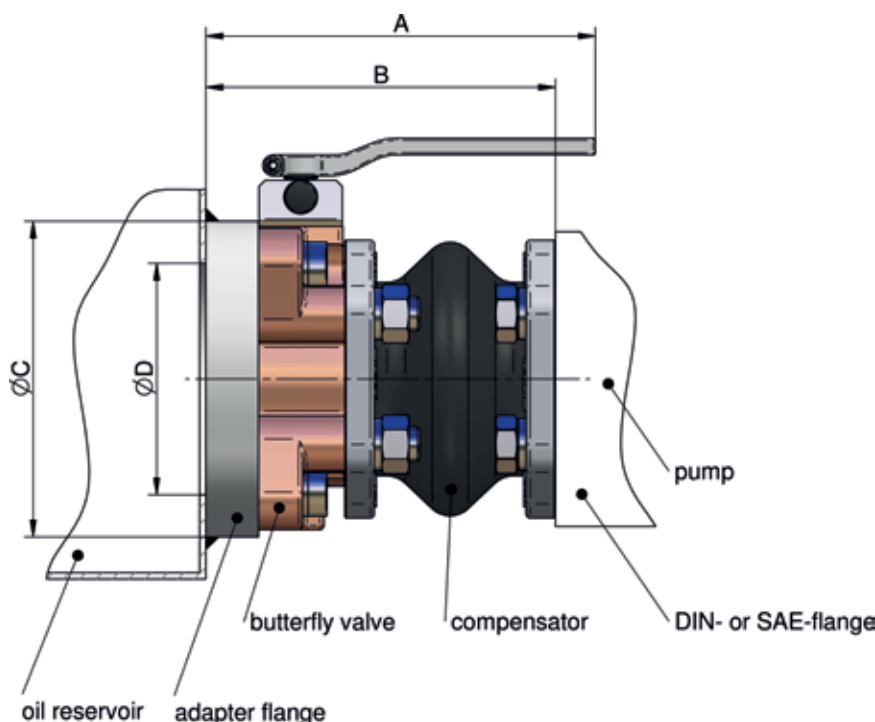
This data sheet shows a technical overview of our products. Please contact us if more exact information is needed. As we are constantly improving our products, their characteristics, dimensions and weights may also change, although we do our best to incorporate these changes continually. The information in this data sheet is intended to be used as a first general guideline only. asa assumes no liability for any information therein, any errors, omissions, misprints, nor any direct or indirect damages, losses or costs resulting therefrom. The cooling performance and the general technical values indicated in this catalogue are measured at a test bench according to asa testing procedures. Because there is no standardized testing procedure, tests used by other manufacturers could have different results. Due to different conditions in testing and application environments the cooling performance may also vary by +/- 15%. Therefore we recommend all coolers to be checked under the system operating conditions. This is also true for vibrations and mechanical stress as well as for pressure peaks and thermal stress and any other relevant factors. Please read manual before installation.

Suction Unit

SAE 1½" – SAE 5"

The asa suction unit has been developed to provide a compact unit in hydraulic systems. The asa butterfly flange with SAE connections allows the combination with an elastic element (rubber compensator) to make a short compensating and economical connection with the pump port. The asa suction unit is screwed to the asa adapter flange, which is welded to the tank. Due to low installation costs and compact design, purchasing asa suction units is cost effective. A switch (mechanical or inductive) can be mounted on the standard block for monitoring matters.

At the delivery configuration the lever position corresponds to the valve position (can be changed, see butterfly flanges). Thus the aperture angle is well-defined even in mounted state. The handle direction (clockwise or counter clockwise) can be changed by turning the switch bracket. Please note that the butterfly flange may only be opened in mounted state and with greased or lubricated sealing. The adapter flange may only be welded with demounted butterfly flange.



Technical Data

description	order number	size		A	B	C	D	weight
		SAE	DIN	[mm]	[mm]	[mm]	[mm]	[kg]
ESAF – 40	SDAK0040T	1 ½"	40	185	168	130	89	5,20
ESAF – 50	SDAK0050T	2"	50	185	168	150	103	6,20
ESAF – 63	SDAK0063T	2 ½"	65	185	165	150	103	6,40
ESAF – 80	SDAK0080T	3"	80	185	166	150	109	7,50
ESAF – 100	SDAK0100T	4"	100	185	168	180	139	9,80
ESAF – 125	SDAK0125T	5"	125	185	198	205	164	11,60

Working Ranges

working pressure range	0,2 – 1,5 bar absolute
temperature range	–20°C to +80°C

Material

butterfly valve housing	GGG 40 (0.7040), cast iron
valve disc	aluminium
gasket	NBR
compensator flange	steel (galvanized)
compensator rubber inside	NBR
compensator rubber outside	CR
adapter flange	steel

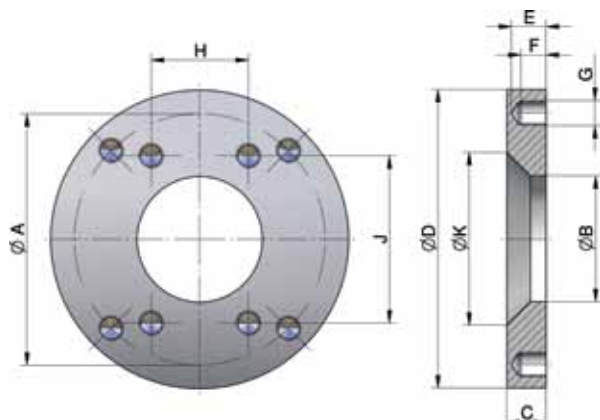


This data sheet shows a technical overview of our products. Please contact us if more exact information is needed. As we are constantly improving our products, their characteristics, dimensions and weights may also change, although we do our best to incorporate these changes continually. The information in this data sheet is intended to be used as a first general guideline only. asa assumes no liability for any information therein, any errors, omissions, misprints, nor any direct or indirect damages, losses or costs resulting therefrom. The cooling performance and the general technical values indicated in this catalogue are measured at a test bench according to asa testing procedures. Because there is no standardized testing procedure, tests used by other manufacturers could have different results. Due to different conditions in testing and application environments the cooling performance may also vary by +/- 15%. Therefore we recommend all coolers to be checked under the system operating conditions. This is also true for vibrations and mechanical stress as well as for pressure peaks and thermal stress and any other relevant factors. Please read manual before installation.

Adapter Flange

accessories for use on butterfly flanges

The asa suction unit is screwed to the asa adapter flange, which is welded to the tank. Due to low installation costs and compact design, purchasing asa suction units is cost effective. The adapter flange may only be welded with demounted butterfly flange.



material: ST 37 (1.0037)

The adapter flange may only be welded without the butterfly flange attached.

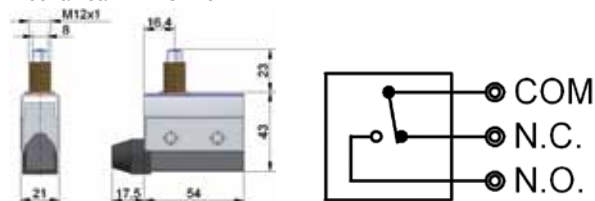
Technical Data

description	order number	A	B	C	D	E	F	G	H	J	K	weight
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]
adapter 40	SDAET040K	110	49	25	130	22	14	M12 (4x)	–	–	89	1,9
adapter 50 & 63	SDAET063K	125	63	25	150	22	14	M12 (4x)	–	–	103	2,45
adapter 80	SDAET080K	–	82	25	150	22	16	M16 (4x)	62	106	109	2,15
adapter 100	SDAET100K	–	103	25	180	22	16	M16 (4x)	77,8	130	139	2,8
adapter 125	SDAET125K	–	128	25	205	22	16	M16 (4x)	92	152	164	3,3

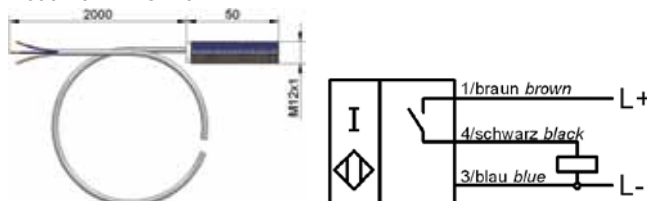
Limit Switch

accessories for use on butterfly flanges and suction units

Mechanical Limit Switch



Inductive Limit Switch



order number	EAFSMK
Control voltage at 15V AC	10A res., 6A ind.
Control voltage at 250V AC	10A res., 4A ind.
Control voltage at 115V AC	0,4A res., 0,05A ind.
Expected mechanical durability	10 ⁷ (at 50cpm)
Expected electrical durability	10 ⁵ (at 20cpm)
Ambient temperature	–20°C to +60°C (68–140°F)
Ambient humidity	max. 95% at 20°C (68°F)
Max. operating speed	120cpm
Protection switch	IP 64
Protection connections	IP 60
Switch function	Two way contact
Rated insulation voltage	250V AC
Rated impulse withstand voltage	2,5kV
Switching over voltage	2,5kV
Rated enclosed thermal current	10A
Conditional short-circuit current	100A
Short circuit protection device	10A fuse

order number	EAFSIK
Operating voltage	10 to 30V
Switching frequency	0 to 1500Hz
Reverse polarity protection	protected
Short-circuit protection	pulsing
Voltage drop	= 3V
Operating current	0 to 200mA
Off state current	0 to 0,5mA typ. 0,1µA
No-load supply current	= 17mA
Indication of the switching state	LED, yellow
Ambient temperature	–25°C to 70°C (77°F–158°F)
Switching element function	PNP make function
Rated operating distance	2mm
Installation	embeddalbe
Assured operating distance	0 to 1,62mm
Reduction factor r_{Al}	0,3
Reduction factor r_{Cu}	0,2
Reduction factor r_{V2A}	0,7
Protection degree	IP67

This data sheet shows a technical overview of our products. Please contact us if more exact information is needed. As we are constantly improving our products, their characteristics, dimensions and weights may also change, although we do our best to incorporate these changes continually. The information in this data sheet is intended to be used as a first general guideline only. asa assumes no liability for any information therein, any errors, omissions, misprints, nor any direct or indirect damages, losses or costs resulting therefrom. The cooling performance and the general technical values indicated in this catalogue are measured at a test bench according to asa testing procedures. Because there is no standardized testing procedure, tests used by other manufacturers could have different results. Due to different conditions in testing and application environments the cooling performance may also vary by +/- 15%. Therefore we recommend all coolers to be checked under the system operating conditions. This is also true for vibrations and mechanical stress as well as for pressure peaks and thermal stress and any other relevant factors. Please read manual before installation.

special accessories other products &

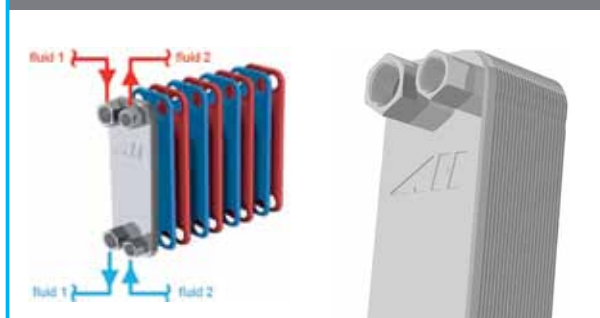
COMPONENT SYSTEMS

Leading quality engineering!



E SERIES

Brazed stainless steel plate heat exchanger



MOTOR/PUMP SYSTEMS

compact motor units with gerotor pumps



ATEX SERIES

ATEX certified air blast coolers according to CE Ex II 2G EEx c IIB T4



TANK FILTER SYSTEMS

Form follows function and creates innovative combinations of filter and tank.



W SERIES

Special equipped heat exchangers for the wind energy industry, coastal and off shore applications



Please contact us for further information or see more products on our website. The calculation program for simple and exact cooler selection and our international correspondence is available for you 24h a day.

www.asahydraulik.com

group

vibration absorbers

gerotor pump units

butterfly flanges

compensators

suction units

accessories

other products



progress in cooling



Austria

asa hydraulik GmbH
Prager Strasse 280
A-1210, Vienna
Tel.: +43 1 292 40 20
Fax: +43 1 292 40 70
support@asahydraulik.com

USA

asa hydraulik of America
160 Meister Avenue 20 A
Branchburg, New Jersey 08876
Tel.: +1 800 473 94 00
Fax: +1 908 541 15 50
sales_us@asahydraulik.com

CHINA

asa hydraulik of Kunshan
江苏省昆山市千灯镇七浦西路25号
postcode: 215341
Tel.: +86 512 57950818
Fax: +86 512 57950898
kunshan@asahydraulik.com