



VZGG



VZVA

Your advantages

Series	VZGG / VZVA
	<ul style="list-style-type: none"> • High-precision measurement with excellent repeatability • HT version for temperatures up to 150 °C with thermally insulated preamplifier (option) • Variety of casing and sealing materials → Universally use for different measurement media • Standard process connection via connecting plates → Quickly replaceable without lengthy interruptions to the process

Архангельск (8182)63-90-72
Астана (7172)727-132
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89
Иваново (4932)77-34-06

Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Липецк (4742)52-20-81
Киргизия (996)312-96-26-47

Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Казахстан (772)734-952-31

Пермь (342)205-81-47
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Таджикистан (992)427-82-92-69

Сургут (3462)77-98-35
Тверь (4822)63-31-35
Томск (3822)98-41-53
Тула (4872)74-02-29
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Ярославль (4852)69-52-93

<https://sika.nt-rt.ru/> || skx@nt-rt.ru

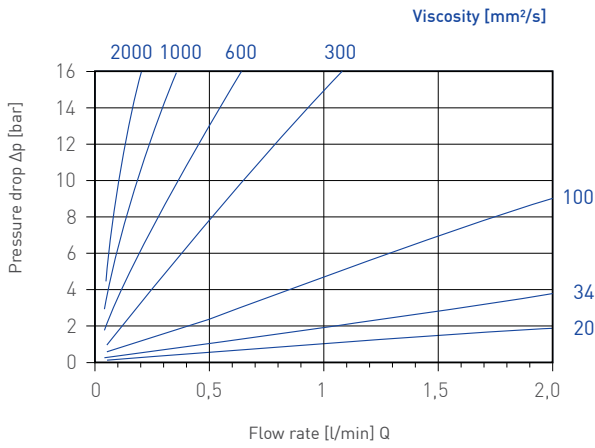
Type	VZ0.025	VZ0.04	VZ0.1	VZ0.2	VZ0.4	VZ1	VZ3	VZ5
Technical data								
Size	0.025	0.04	0.1	0.2	0.4	1	3	5
Process connection	Via subplate with lateral female thread connection							
Measuring range* [l/min]	0.008...2	0.02...4	0.04...8	0.16...16	0.2...40	0.4...80	0.6...160	1...250
Geometric gear volume [cm³]	0.025	0.04	0.1	0.245	0.4	1.036	3	5.222
Measuring accuracy	±0.3 % of reading (21 mm ² /s)							
Repeatability	< 0.1 % under same conditions							
Start of gear wheel rotation [l/min]	0.001	0.004	0.008	0.01	0.01	0.02	0.03	0.04
Viscosity of medium	1...100 000 mm ² /s							
Medium temperature range**	FKM	FEP	EPDM					
→ Standard	-15...120 °C	-30...120 °C	-30...120 °C					
→ Without preamplifier (for TD8250)	0...60 °C	0...60 °C	0...60 °C					
→ High temperature	-15...150 °C	-30...130 °C	-30...130 °C					
Ambient temperature range**	FKM	FEP	EPDM					
	-15...80 °C	-30...80 °C	-30...80 °C					
Pressure rating								
→ VZ 0.025... to VZ 1...	Max. 400 bar							
→ VZ 3... to VZ 5...	Max. 315 bar							
→ High pressure	Higher pressure rating on request							
Degree of protection EN 60529	IP65							
Output signals								
→ Puls rate [Pulse/l]	40 000	25 000	10 000	4081.63	2500	965.25	333.33	191.5
→ Resolution [ml/Puls]	0.025	0.04	0.1	0.245	0.4	1.036	3	5.222
→ Signal shape	2-channel, squarewave, PNP, pulse duty ratio 1:1							
Electrical data								
Electrical connection	Plug connector cable socket							
Power supply	12...30 VDC / max. 90 mA							
Power consumption [short-circuit proof]	0.9 W							

* For media with high viscosity the measuring range is reduced. The max. pressure drop shouldn't exceeded 16 bar (see pressure drop diagrams).

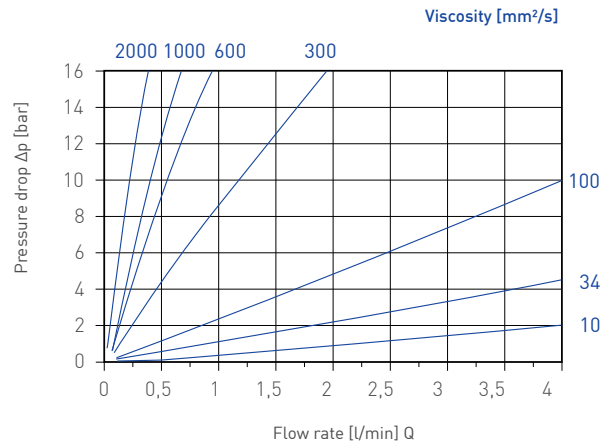
** Depending on sealing material

Options	
For type	On request
VZVA	→ Direct process connection

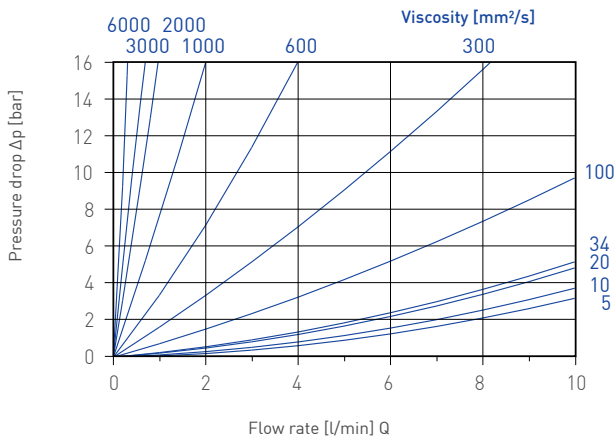
Typical pressure drop VZ0.025



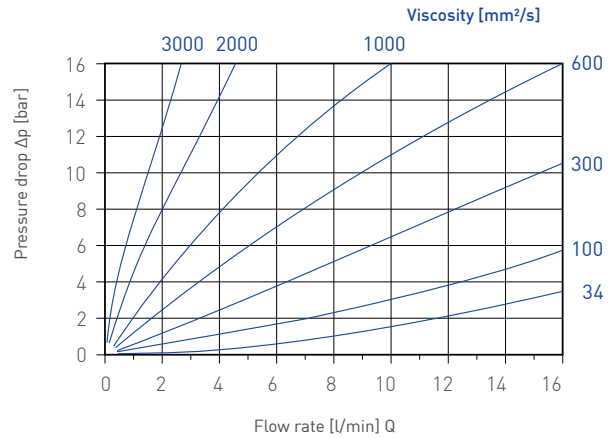
Typical pressure drop VZ0.04



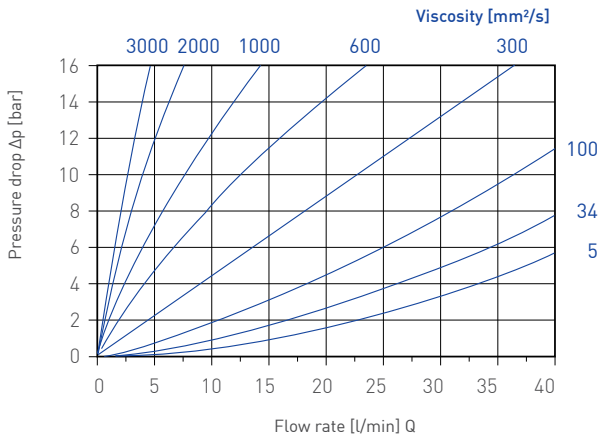
Typical pressure drop VZ0.1



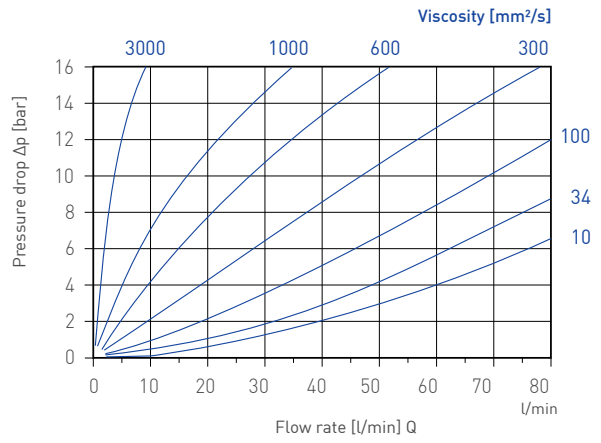
Typical pressure drop VZ0.2



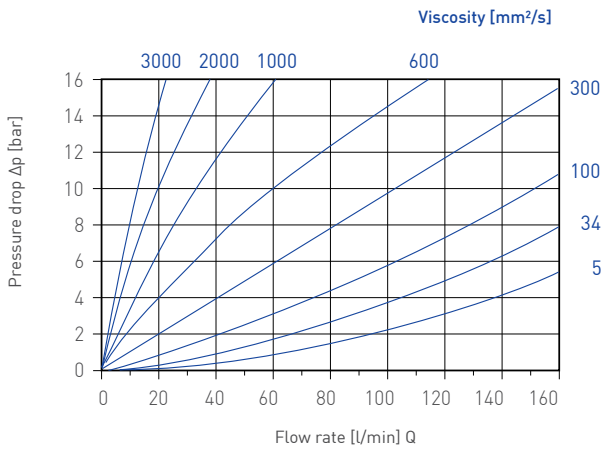
Typical pressure drop VZ0.4



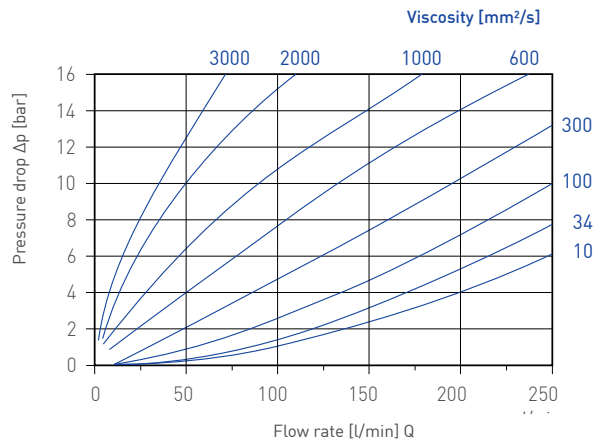
Typical pressure drop VZ1



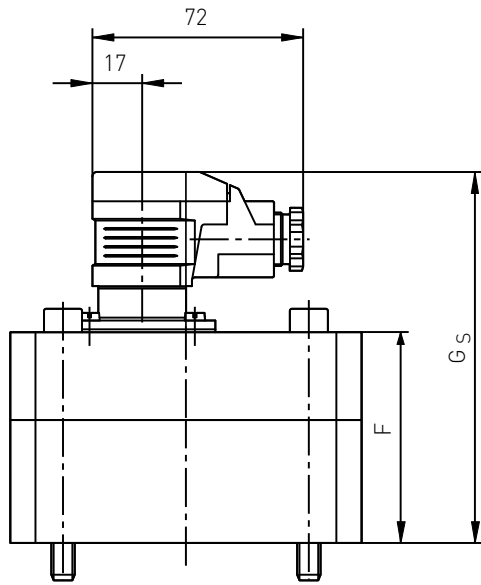
Typical pressure drop VZ3



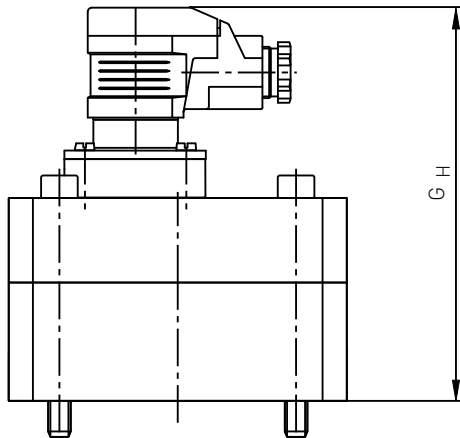
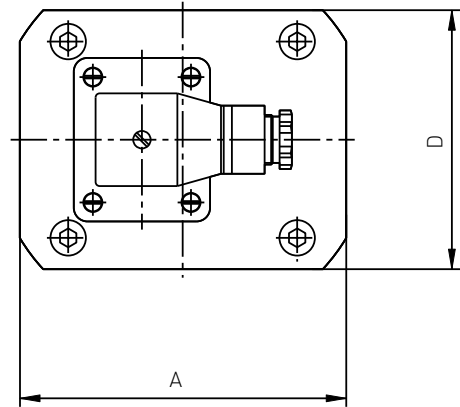
Typical pressure drop VZ5



VZGG



Standard version



High temperature version

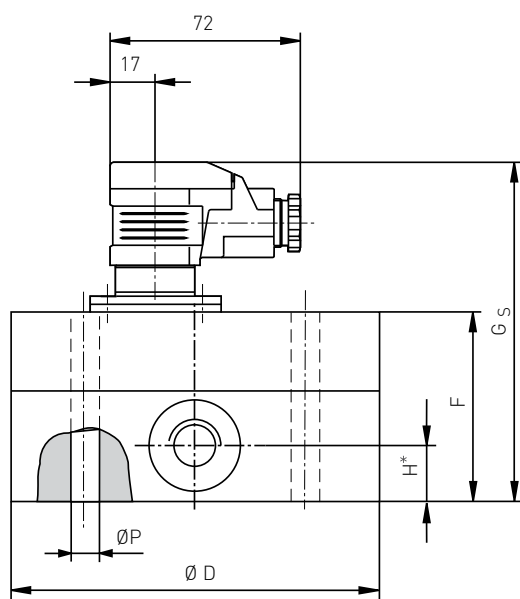
Material

Housing	Ductile iron EN-GJS-400-15
Gear wheels	Steel 1.7139
Bearings	Ball bearings
Seals	Standard: FKM Option: EPDM, FEP

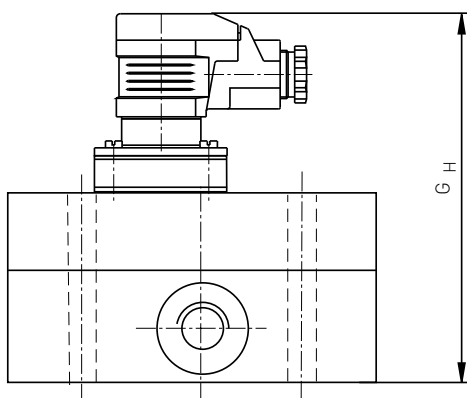
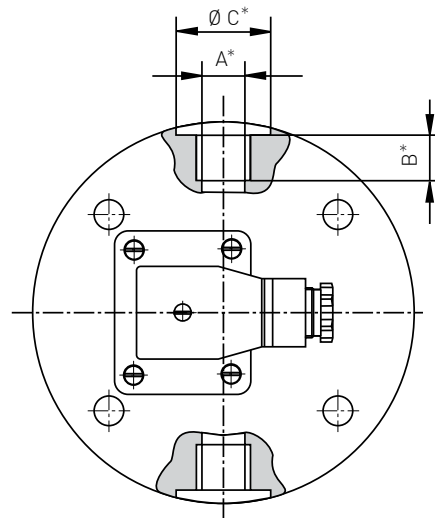
Dimensions

Type	VZ0.025GG	VZ0.04GG	VZ0.1GG	VZ0.2GG	VZ0.4GG	VZ1GG	VZ3GG	VZ5GG
A [mm]	85	85	85	85	100	120	170	170
D [mm]	60	60	60	60	90	95	120	120
F [mm]	50	56	65	57	63	72	89	105
GS [mm]	101	107	116	108	114	123	140	156
GH [mm]	114	120	129	121	127	136	153	169
Weight [kg]	1.8	2	2.3	2	3.7	5.2	9	13

VZVA



Standard version



High temperature version

* For direct process connection

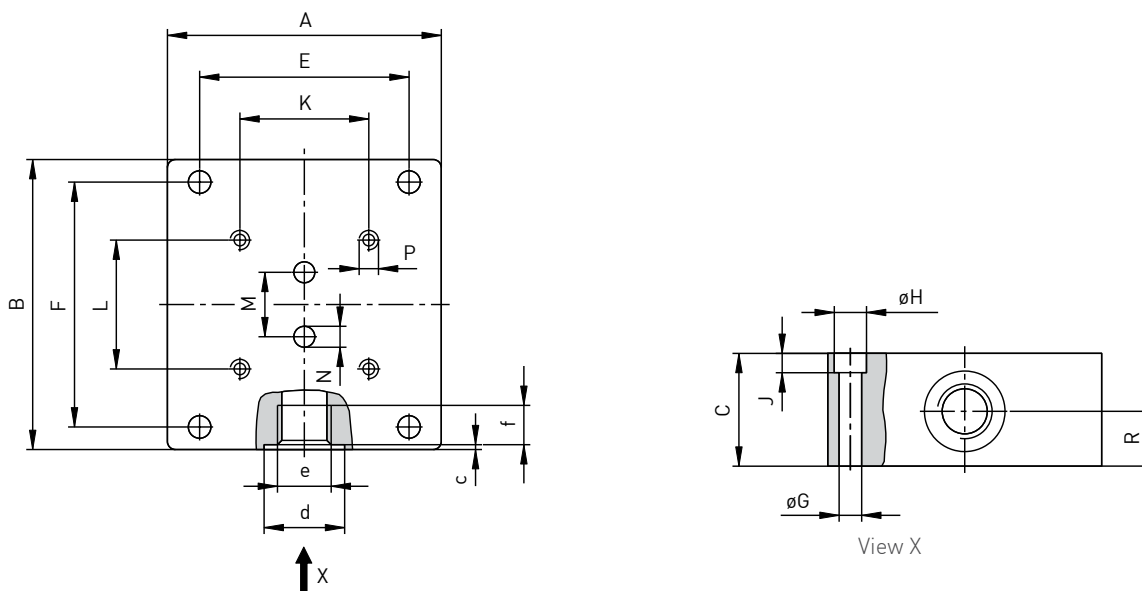
Material	
Housing	Stainless steel 1.4404
Gear wheels	Stainless steel 1.4462
Bearings	Ball bearings stainless steel
Seals	Standard: FKM Option: EPDM, FEP

Dimensions

Type	VZ0.025VA	VZ0.04VA	VZ0.1VA	VZ0.2VA	VZ1VA	VZ3VA	VZ5VA
D [mm]	94	94	94	94	124	170	170
F [mm]	55	56	65	57	72	89	105
GS [mm]	106	107	116	108	123	140	156
GH [mm]	119	120	129	121	136	153	169
Gewicht [kg]	3	3	3	3.1	7	15.9	18.7
Direct process connection							
A [mm]	G $\frac{1}{8}$	G $\frac{1}{4}$	G $\frac{3}{8}$	G $\frac{3}{8}$	G $\frac{1}{2}$	G 1	G 1
B [mm]	9	13	13	13	15	19	19
C [mm]	17	21	25	25	29	42	42
H [mm]	15	15	20	16	22	30	30

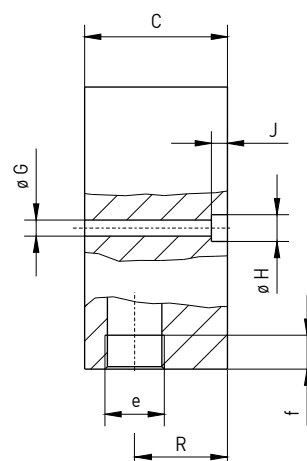
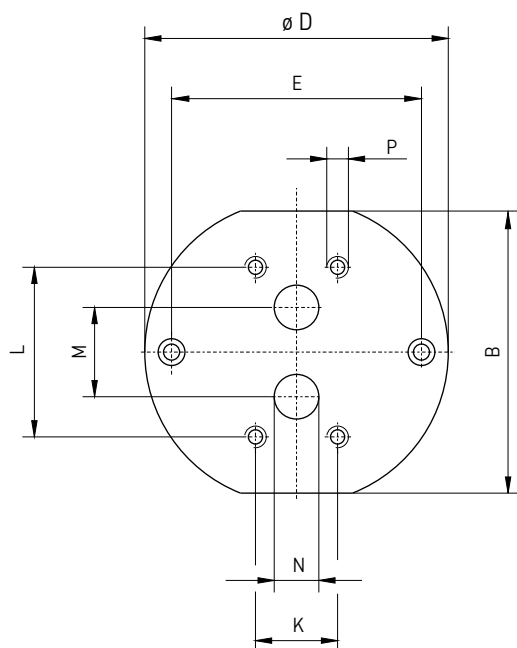
VZGG // Subplates

For type	VZ0.025GG / VZ0.04GG / VZ0.1GG / VZ0.2GG	VZ0,4GG	VZ1GG	VZ3GG / VZ5GG
A [mm]	85	100	100	160
B [mm]	90	110	120	165
C [mm]	35	37	37	80
c [mm]	0.7	0,7	0.7	1
d [mm]	25	29	29	42
E [mm]	65	86	80	140
e	G $\frac{3}{8}$	G $\frac{1}{2}$	G $\frac{1}{2}$	G 1
F [mm]	76	96	106	145
f [mm]	13	15	15	19
G [mm]	7	7	7	9
H [mm]	11	11	11	15
J [mm]	7	7	7	9
K [mm]	70	80	84	46
L [mm]	40	38	72	95
M [mm]	20	34	35	50
N [mm]	6,5	16	12	25
P [mm]	M 6/14t	M 8/18t	M 8/18t	M 12/24t
R [mm]	17	18.5	17.5	28
Weight [kg]	1.8	2.7	2.9	14
Material	Ductile iron EN-GJL-250	Ductile iron EN-GJL-400-15		Ductile iron EN-GJL-250



VZVA // Subplates

For type	VZ0.025VA / VZ0.04VA / VZ0.1VA / VZ0.2VA	VZ1VA	VZ3VA / VZ5VA
B [mm]	85	116	158
C [mm]	35	37	80
D [mm]	94	124	170
E [mm]	75	100	140
e	G $\frac{3}{8}$	G $\frac{1}{2}$	G1
f [mm]	13	15	19
G [mm]	7	9	9
H [mm]	11	15	15
J [mm]	7	9	9
K [mm]	70	84	46
L [mm]	40	72	95
M [mm]	20	35	50
N [mm]	6.5	12	25
P [mm]	M 6/14t	M 8/18t	M 12/24t
R [mm]	18	19.5	52
Weight [kg]	1.7	3.2	13.9
Material	Stainless steel 1.4404		



Order code						
Type	Size					
VZ0.025	0.025	VZ0025				
VZ0.04	0.04	VZ004				
VZ0.1	0.1	VZ010				
VZ0.2	0.2	VZ020				
VZ0.4	0.4 (only ductile iron)	VZ040				
VZ1	1	VZ100				
VZ3	3	VZ300				
VZ5	5	VZ500				
Material						
Ductile iron		GG				
Stainless steel		VA				
Seals						
FKM			V3			
EPDM			E3			
FEP			P3			
Process connection						
Via subplates				2		
Direct (only for stainless steel)				1		
Pre-amplifier						
Integrated					I00S	
Without pre-amplifier, for TD8250					K00S	
Isolated for high temperature version					E00S	
Example order number		VZ0025	GG	V3	2	I00S

Order code				
Subplates appropriate to				
VZ0.025 / VZ0.04 / VZ0.1 / VZ0.2	AP004		0380S	
VZ0.4 (only ductile iron)	AP040		0120S	
VZ1	AP100		0120S	
VZ3 / VZ5	AP500		1000S	
Material				
Ductile iron		GG		
Stainless steel		VA		
Example order number		AP004	GG	0380S

Архангельск (8182)63-90-72
 Астана (7172)727-132
 Астрахань (8512)99-46-04
 Барнаул (3852)73-04-60
 Белгород (4722)40-23-64
 Брянск (4832)59-03-52
 Владивосток (423)249-28-31
 Волгоград (844)278-03-48
 Вологда (8172)26-41-59
 Воронеж (473)204-51-73
 Екатеринбург (343)384-55-89
 Иваново (4932)77-34-06

Ижевск (3412)26-03-58
 Иркутск (395)279-98-46
 Казань (843)206-01-48
 Калининград (4012)72-03-81
 Калуга (4842)92-23-67
 Кемерово (3842)65-04-62
 Киров (8332)68-02-04
 Краснодар (861)203-40-90
 Красноярск (391)204-63-61
 Курск (4712)77-13-04
 Липецк (4742)52-20-81
 Киргизия (996)312-96-26-47

Магнитогорск (3519)55-03-13
 Москва (495)268-04-70
 Мурманск (8152)59-64-93
 Набережные Челны (8552)20-53-41
 Нижний Новгород (831)429-08-12
 Новокузнецк (3843)20-46-81
 Новосибирск (383)227-86-73
 Омск (3812)21-46-40
 Орел (4862)44-53-42
 Оренбург (3532)37-68-04
 Пенза (8412)22-31-16
 Казахстан (772)734-952-31

Пермь (342)205-81-47
 Ростов-на-Дону (863)308-18-15
 Рязань (4912)46-61-64
 Самара (846)206-03-16
 Санкт-Петербург (812)309-46-40
 Саратов (845)249-38-78
 Севастополь (8692)22-31-93
 Симферополь (3652)67-13-56
 Смоленск (4812)29-41-54
 Сочи (862)225-72-31
 Ставрополь (8652)20-65-13
 Таджикистан (992)427-82-92-69

Сургут (3462)77-98-35
 Тверь (4822)63-31-35
 Томск (3822)98-41-53
 Тула (4872)74-02-29
 Тюмень (3452)66-21-18
 Ульяновск (8422)24-23-59
 Уфа (347)229-48-12
 Хабаровск (4212)92-98-04
 Челябинск (351)202-03-61
 Череповец (8202)49-02-64
 Ярославль (4852)69-52-93

<https://sika.nt-rt.ru/> || skx@nt-rt.ru