

Insert Valves**Flow control**

Designation	Description	Cavity	Code	Data sheet	Pages
Insert valve flow control, 2-way pressure compensated partially adjustable	VCD1	Special	0TF301XYZ	RE 18329-80	533
Insert valve flow control, 2-way pressure compensated fixed setting	SFC1	Special	0TF10100YZ	RE 18329-75	537
Insert valve flow control, 2-way pressure compensated fixed setting	IFC2	Special	0TF1020009Z	RE 18329-70	539
Insert valve hose burst	VPN1	Special	0TF401XYZ	RE 18329-85	541
Flow control, restrictor with reverse flow check	GSU1	Special	GSU1_	RE 18329-83	545

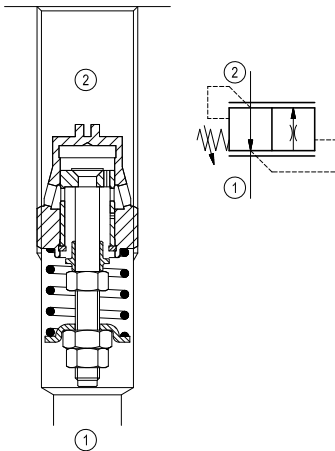
Insert type Flow control, 2-way pressure compensated, partially adjustable



2

VCD1

OT.F3.01 - X - Y - Z



Note: available also as "Sleeve valve for line mounting"
See data sheets RE 18316-14, RE 18316-15,
RE 18316-16 and RE 18316-17

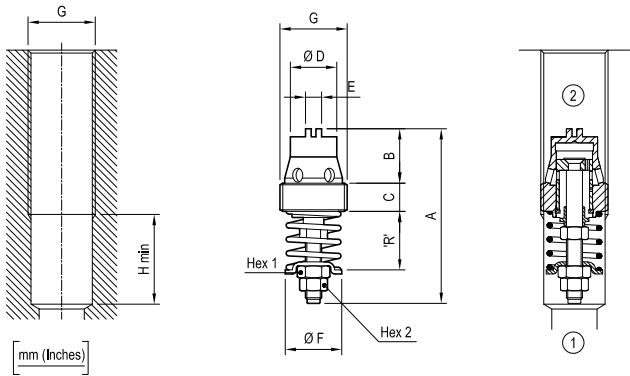
Description

These valves can be used either as lowering control devices or as two ways flow regulators. In the first option, they keep the lowering speed largely independent from the load, while, in the second option, they limit flow to the preset value which can be adjusted within the regulate flow path. On the opposite flow direction, from 2 to 1, the valve is acting as a free flow check reducing the pressure drop to low values (see diagram $\Delta P - Q$).

Technical data

Max. operating pressure	bar (psi)	315 (4500)
Max. flow	l/min. (gpm)	see "Flow range adjustment" table and "Performance" graphs
Fluid temperature range	°C (°F)	-30 to 100 (-22 to 212)
Installation torque	Nm (ft-lbs)	see "Dimensions" table
Weight	kg (lbs)	see "Dimensions" table
Special cavity		see "Dimensions"
Fluids		Mineral-based or synthetics with lubricating properties at viscosities of 10 to 500 mm ² /s (cSt)
Filtration		Nominal value max. 10µm (NAS 8) ISO 4406 19/17/14
Installation		No restrictions
Other Technical Data		See data sheet RE 18350-50

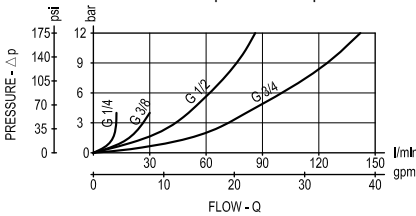
Dimensions



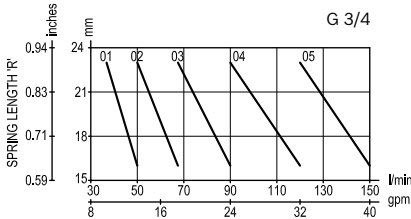
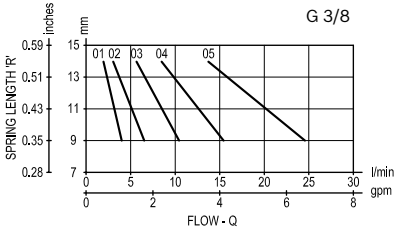
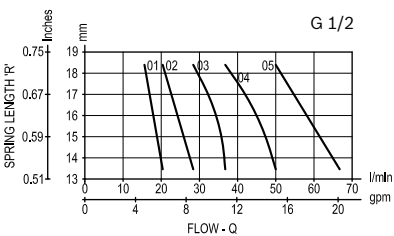
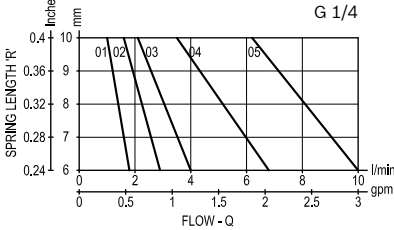
G	A	B	C	D	E	F	Hex 1	Hex 2	H	Weight kg (lbs)	Inst. torque Nm (ft-lbs)	Flow max. l/min. (gpm)
G 1/4	38.3 (1.51)	12.5 (0.49)	7 (0.28)	10 (0.39)	4 (0.16)	10.3 (0.41)	5.5 (0.22)	4.5 (0.18)	22 (0.87)	0.012 (0.027)	6 (4)	10 (3)
G 3/8	43 (1.69)	13.5 (0.53)	7 (0.28)	11.5 (0.45)	4 (0.16)	14 (0.55)	7 (0.28)	6 (0.24)	23 (0.91)	0.025 (0.055)	8 (6)	25 (7)
G 1/2	49 (1.93)	16 (0.63)	8 (0.32)	15 (0.59)	6 (0.24)	18.2 (0.72)	7 (0.28)	6 (0.24)	27 (1.06)	0.038 (0.084)	12 (9)	67 (18)
G 3/4	60 (2.36)	21 (0.83)	10 (0.39)	20 (0.79)	6 (0.24)	23 (0.91)	7 (0.28)	6 (0.24)	31 (1.22)	0.070 (0.154)	15 (11)	150 (40)

Performance

Free flow pressure drop



Performance curves: spring's length - flow (regulated flow) with nominal pressure of 50 bar (725 psi).
Curves represent the obtained flow range related to orifices 01-02-03-04-05.



Ordering code

0T.F3.01

X

Y

Z

*

Series 0/A to L
unchanged performances and dimensions

Insert type - Flow control

Adjustments

= 02 Locking nut + counter nut
see graphs ('R' - Q)

Port sizes

= 09 G 1/4

= 02 G 3/8

= 03 G 1/2

= 04 G 3/4

Flow range adjustment l/min. (gpm)

	for Y = 09	for Y = 02	for Y = 03	for Y = 04
= 01	1-1.6 (0.26-0.42)	2.5-4 (0.66-1.06)	16-21 (4.23-5.55)	37-50 (9.78-13.2)
= 02	1.6-2.5 (0.42-0.66)	4-6.3 (1.6-1.67)	21-28 (5.55-7.4)	50-67 (13.2-17.7)
= 03	2.5-4 (0.66-1.06)	6.3-10 (1.67-2.64)	28-37 (7.4-9.78)	67-90 (17.7-23.8)
= 04	4-6.3 (1.6-1.67)	10-16 (2.64-4.23)	37-50 (9.78-13.2)	90-120 (23.8-31.7)
= 05	6.3-10 (1.67-2.64)	16-25 (4.23-6.61)	50-67 (13.2-17.7)	120-150 (31.7-39.6)

Special flow settings available.
Please contact factory authorized representative for ordering code

Type	Material number
0TF301020201000	R931002328
0TF301020202000	R931002329
0TF301020203000	R931000012
0TF301020204000	R931000013
0TF301020205000	R931000424
0TF301020301000	R931002330
0TF301020302000	R931002332
0TF301020303000	R931002034
0TF301020304000	R931000342
0TF301020305000	R931002333
0TF301020401000	R931000014
0TF301020402000	R931002334
0TF301020403000	R931002335
0TF301020404000	R931002336
0TF301020405000	R931002337
0TF301020901000	R931000015
0TF301020902000	R931002324
0TF301020903000	R931002325
0TF301020904000	R931002326
0TF301020905000	R931002327

Type	Material number

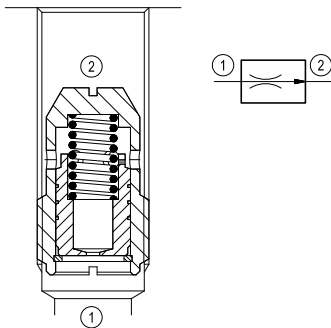
Insert type Flow control, 2-way pressure compensated fixed setting



2

SFC1

OT.F1.01.00 - Y - Z



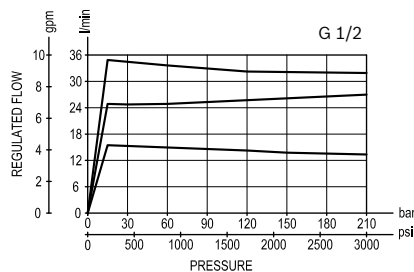
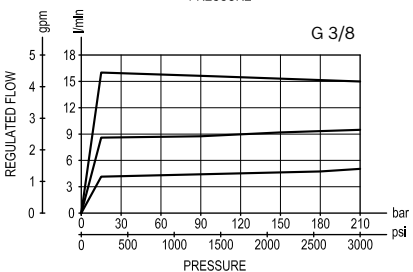
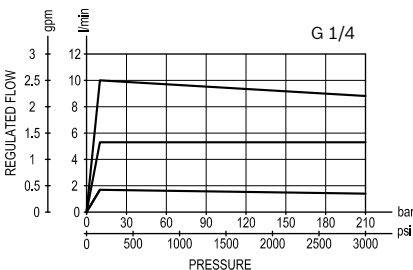
Description

A constant flow rate, regardless of system pressures, is established from 1 to 2 while a minimum pressure differential of 145 psi exists between the two ports. The valve cannot be adjusted for variable flow output. Flow from 2 to 1 is limited by the diameter of the selected control orifice and is not pressure compensated.

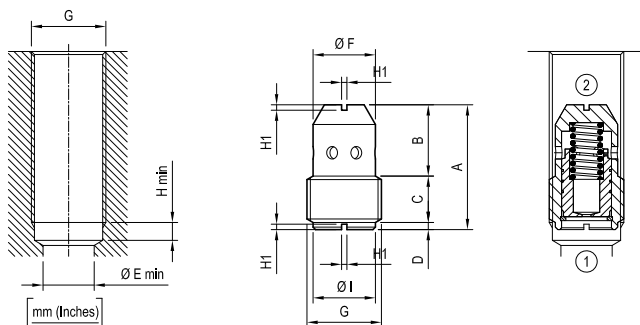
Technical data

Max. operating pressure	bar (psi)	210 (3000)
Max. flow	l/min. (gpm)	see "Regulated flow range" table
Fluid temperature range	°C (°F)	-30 to 100 (-22 to 212)
Weight	kg (lbs)	see "Dimensions" table
Special cavity		see "Dimensions"
Fluids		Mineral-based or synthetics with lubricating properties at viscosities of 10 to 500 mm ² /s (cSt)
Filtration		Nominal value max. 10µm (NAS 8) ISO 4406 19/17/14
Installation		No restrictions
Other Technical Data		See data sheet RE 18350-50

Performance



Dimensions



G	A	B	C	D	E	F	I	H	H1	Weight kg (lbs)	Flow max. l/min. (gpm)
G 1/4	25.5 (1)	13.5 (0.53)	8.5 (0.34)	3 (0.12)	8 (0.32)	10 (0.39)	11 (0.43)	5 (0.2)	1.5 (0.6)	0.011 (0.024)	10 (3)
G 3/8	28 (1.1)	15 (0.59)	10.5 (0.41)	2 (0.08)	11 (0.43)	14 (0.55)	14.5 (0.57)	5 (0.2)	1.5 (0.6)	0.024 (0.053)	16 (4)
G 1/2	35 (1.38)	19.5 (0.77)	13 (0.52)	2 (0.08)	14 (0.55)	17.5 (0.69)	17.5 (0.69)	5 (0.2)	1.5 (0.6)	0.048 (0.106)	40 (11)

Ordering code

OT.F1.01.00	Y	Z	*
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Note: available also as "Sleeve valve for line mounting"
See data sheets RE 18316-12 and RE 18316-13

Series O/A to L
unchanged performances and dimensions

Insert type - Flow control,
2-way pressure compensated
fixed setting

Port sizes

= 09 G 1/4

= 02 G 3/8

= 03 G 1/2

Regulated flow range l/min. (gpm)										
	= 01	= 02	= 03	= 04	= 05	= 06	= 07	= 08	= 09	= 10
for Y=09	1 (0.3) ± 20%	2 (0.5) ± 20%	3 (0.8) ± 20%	4 (1.1) ± 15%	5 (1.3) ± 15%	6 (1.6) ± 15%	7 (1.9) ± 15%	8 (2.1) ± 15%	9 (2.4) ± 15%	10 (2.6) ± 15%
for Y=02	4 (1.1) ± 15%	5 (1.3) ± 15%	6 (1.6) ± 15%	8 (2.1) ± 15%	10 (2.6) ± 15%	12 (3.2) ± 15%	14 (3.7) ± 10%	16 (4.2) ± 10%	-	-
for Y=03	12 (3.2) ± 15%	16 (4.2) ± 10%	20 (5.3) ± 10%	25 (6.6) ± 10%	30 (7.9) ± 10%	35 (9.3) ± 10%	40 (10.6) ± 10%	-	-	-

Type	Material number
OTF101000201000	R931002311
OTF101000202000	R931002312
OTF101000203000	R931002313
OTF101000204000	R931002314
OTF101000205000	R931000009
OTF101000206000	R931002315
OTF101000207000	R931002316
OTF101000208000	R931002317
OTF101000301000	R931002318
OTF101000302000	R931002319
OTF101000303000	R931002320
OTF101000304000	R931002321
OTF101000305000	R931002322

Type	Material number
OTF101000306000	R931002063
OTF101000307000	R931001404
OTF101000901000	R931002304
OTF101000902000	R931000010
OTF101000903000	R931000272
OTF101000904000	R931002305
OTF101000905000	R931002306
OTF101000906000	R931000011
OTF101000907000	R931002307
OTF101000908000	R931002308
OTF101000909000	R931002309
OTF101000910000	R931002310

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Subject to change.

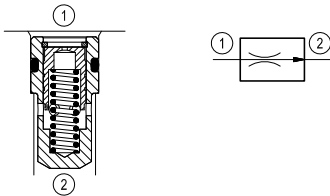
Insert type Flow control, 2-way pressure compensated fixed setting

IFC2

OT.F1.02.00.09 - Z



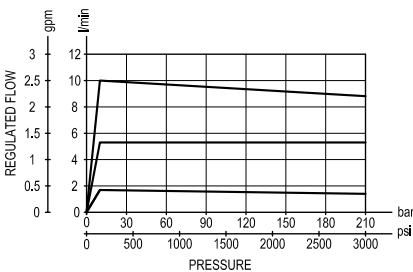
2



Description

A constant flow rate, regardless of system pressures, is established from 1 to 2 while a minimum pressure differential of 145 psi (10 bar) exists between the two ports. The valve cannot be adjusted for variable flow output. Flow from 2 to 1 is limited by the diameter of the selected control orifice and is not pressure compensated.

Performance

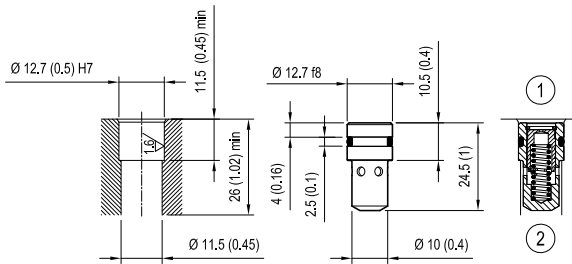


Technical data

Max. operating pressure	bar (psi)	210 (3000)
Max. flow	l/min. (gpm)	see "Regulated flow range" table
Fluid temperature range	°C (°F)	-30 to 100 (-22 to 212)
Weight	kg (lbs)	0.013 (0.03)
Special cavity		see "Dimensions"
Seal kit (*)	code material no.	RGIFC2010000100 R931002403
Fluids		Mineral-based or synthetics with lubricating properties at viscosities of 10 to 500 mm ² /s (cSt)
Filtration		Nominal value max. 10µm (NAS 8) ISO 4406 19/17/14
Other Technical Data		See data sheet RE 18350-50

(*) Only external seals for 10 valves

Dimensions



Ordering code

OT.F1.02.00	09	Z	*
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Insert type - Flow control,
2-way pressure compensated
fixed setting

Port size Ø 12.7 (0.5)

Series O/A to L
unchanged performances and dimensions

Regulated flow range l/min. (gpm)									
= 01	= 02	= 03	= 04	= 05	= 06	= 07	= 08	= 09	= 10
1 (0.3) ± 20%	2 (0.5) ± 20%	3 (0.8) ± 20%	4 (1.1) ± 15%	5 (1.3) ± 15%	6 (1.6) ± 15%	7 (1.9) ± 15%	8 (2.1) ± 15%	9 (2.4) ± 15%	10 (2.6) ± 15%

Type	Material number
OTF102000901000	R931002294
OTF102000902000	R931002295
OTF102000903000	R931002296
OTF102000904000	R931002297
OTF102000905000	R931002298
OTF102000906000	R931002299
OTF102000907000	R931002300
OTF102000908000	R931002301
OTF102000909000	R931002302
OTF102000910000	R931002303

Type	Material number

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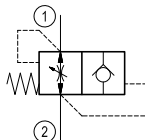
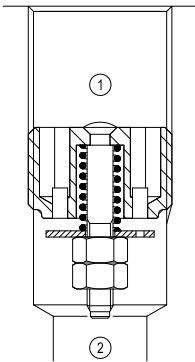
Insert type Hose burst



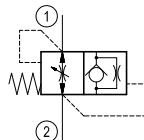
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VPN1

OT.F4.01 - X - Y - Z



Hose burst check valve



Hose burst check valve
with orifice

Description

When the lowering speed exceeds preset value, as it might happen in case of hose failure, the flow is blocked. These valves should ideally be screwed directly into the actuator outlet port. Sealing parts are superfinished and enable to lock the load in the position where the actuator is in the moment of hose failure. These valves can be supplied, on request, with an orifice on the disc, allowing an emergency lowering of the load. It is recommended to fit a flow regulator valve downstream the hose burst valve, at the end of the flexible hose, to control the lowering speed at the nominal value. The "R" gap must be adjusted to allow a flow at least 50% over the nominal regulated flow from the actuator.

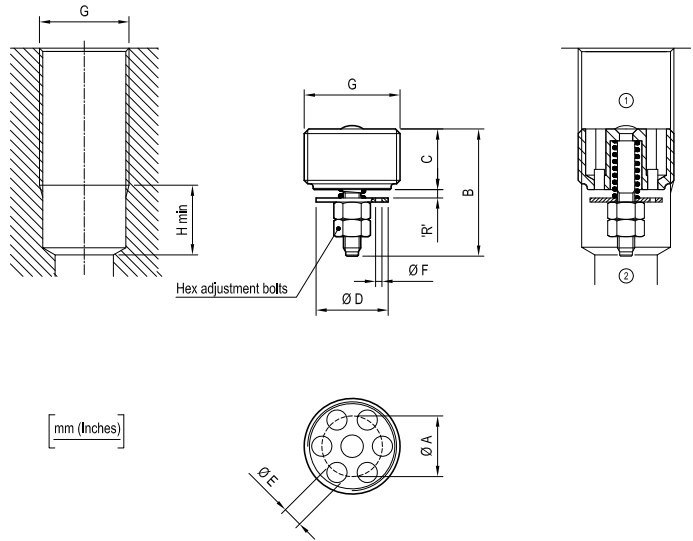
The valve is only supposed to be operated in case of hose failure. Should this circumstance occur, we strongly recommend to verify the integrity of the valve and eventually to replace it in the event that the pressure spike generated by the hose failure was such to damage permanently some valve components.

Note: available also as "Sleeve valve for line mounting"
See data sheets RE 18316-85, RE 18316-86, RE 18316-87 and RE 18316-88

Technical data

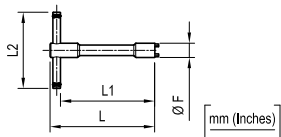
Max. operating pressure	bar (psi)	315 (4500)
Max. flow	l/min. (gpm)	see performance graphs ('R'-Q)
Fluid temperature range	°C (°F)	-30 to 100 (-22 to 212)
Installation torque	Nm (ft-lbs)	see "Dimensions" table
Weight	kg (lbs)	see "Dimensions" table
Special cavity		see "Dimensions"
Fluids		Mineral-based or synthetics with lubricating properties at viscosities of 10 to 500 mm ² /s (cSt)
Filtration		Nominal value max. 10µm (NAS 8) ISO 4406 19/17/14
Installation		No restrictions
Other Technical Data		See data sheet RE 18350-50

Dimensions



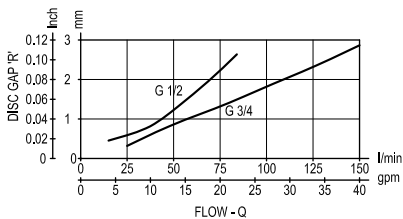
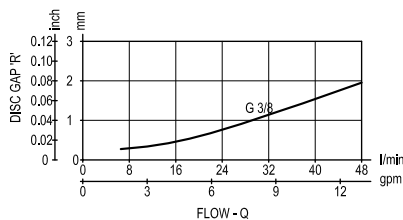
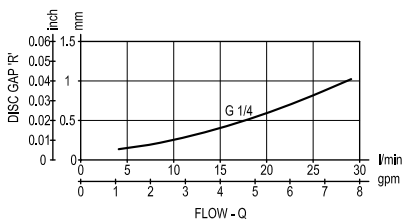
G	A	B	C	D	E	F	H	Hex	Weight kg (lbs)	Inst. torque Nm (ft-lbs)	Flow max. l/min. (gpm)	
											min.	max.
G 1/4	8.5 (0.34)	17.5 (0.69)	8 (0.32)	9.5 (0.37)	2.4 (0.1)	on request	11 (0.43)	5.5 (0.22)	0.005 (0.011)	2 (1.5)	4 (1)	25 (7)
G 3/8	10.5 (0.41)	23 (0.91)	10.5 (0.41)	12.5 (0.49)	3.5 (0.14)	on request	11 (0.43)	5.5 (0.22)	0.010 (0.022)	3 (2)	6 (2)	50 (13)
G 1/2	13 (0.51)	25 (0.98)	12 (0.47)	15 (0.59)	4.5 (0.18)	on request	15 (0.59)	7 (0.28)	0.020 (0.044)	4 (3)	16 (4)	80 (21)
G 3/4	16 (0.63)	30.5 (1.2)	17 (0.67)	18 (0.71)	6 (0.24)	on request	16 (0.63)	7 (0.28)	0.042 (0.093)	10 (7)	25 (7)	150 (40)

Fitting tool dimensions



Type	F	L	L1	L2	Tool code	Material number
VPN1.G14	11.3 (0.45)	120 (4.72)	110 (4.33)	60 (2.36)	AVA18	R931002467
VPN1.G38	15 (0.59)	120 (4.72)	108 (4.25)	80 (3.15)	AVA18-01	R931002468
VPN1.G12	18.8 (0.74)	120 (4.72)	108 (4.25)	80 (3.15)	AVA18-02	R931002469
VPN1.G34	24 (0.95)	120 (4.72)	108 (4.25)	80 (3.15)	AVA18-03	R931002470

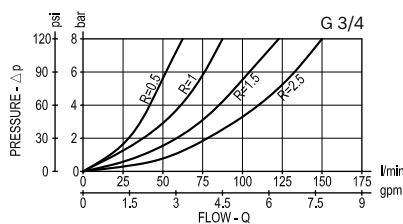
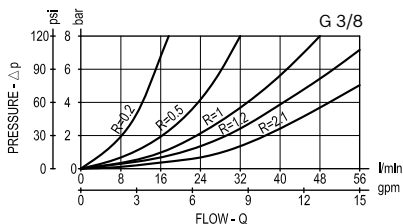
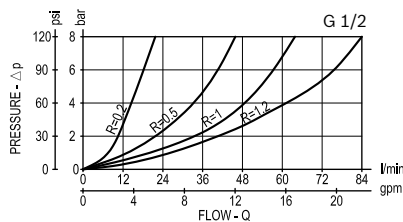
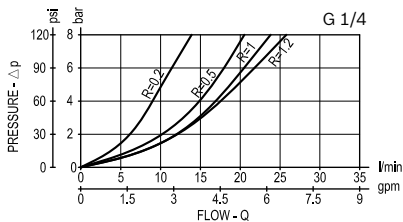
Performance



Performance curves R/flow (allowance can be $\pm 10\%$ from the curve)
After assembling the valve are preadjusted at the following values

0.5 mm (0.02 in) for G 1/4 and G 3/8
0.7 mm (0.03 in) for G 1/2 and G 3/4

Flow performance from '1' to '2' depending on R-length



Special flow settings available.
Please contact factory authorized representative for ordering code

Ordering code

OT.F4.01	X	Y	Z	*
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Insert type -
Check, hose burst

Adjustments

= 03 Locking nut + counter nut
 see graphs ('R' - Q)

Port sizes

= 09 G 1/4

= 02 G 3/8

= 03 G 1/2

= 04 G 3/4

Series O/A to L
unchanged performances and dimensions

	Orifice diameter (mm)
= 00	no orifice
= 01	0.5
= 02	0.6
= 03	0.7
= 04	0.8
= 05	0.9
= 06	1
= 07	1.2
= 08	1.3
= 09	1.5
= 10	1.9
= 11	2

Type	Material number
OTF401030200000	R931000017
OTF401030300000	R901127828
OTF401030400000	R901161819
OTF401030900000	R931000021

Type	Material number

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Subject to change.

Insert type Flow control, restrictor with reverse flow check

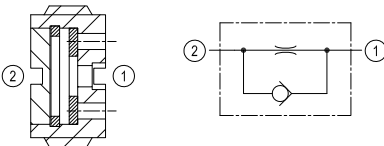
GSU1



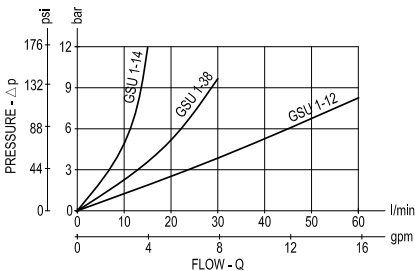
2

Description

The "B-A" flow is restricted by a calibrated orifice while flow "A-B" is always allowed through the incorporated check valve. Pressure compensation is not provided and flow depends from pressure drop and viscosity. The GSU1 cartridge is available in different orifice sizes.



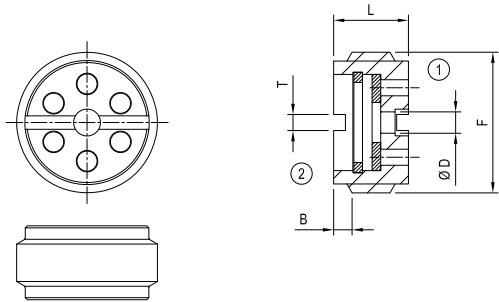
Performance



Technical data

Max. operating pressure	bar (psi)	300 (4300)
Max. flow	l/min. (gpm)	see "Regulated flow range" table
Fluid temperature range	°C (°F)	-30 to 100 (-22 to 212)
Weight	kg (lbs)	see "Dimensions" table
Special cavity		see "Dimensions"
Fluids		Mineral-based or synthetics with lubricating properties at viscosities of 10 to 500 mm ² /s (cSt)
Filtration		Nominal value max. 10µm (NAS 8) ISO 4406 19/17/14
Installation		No restrictions
Other Technical Data		See data sheet RE 18350-50

Dimensions



F	L	B	T	Weight kg (lbs)	Flow max. l/min. (gpm)
G 1/4	7 (0.28)	1.1 (0.04)	2 (0.08)	0.005 (0.011)	15 (4)
G 3/8	8.5 (0.33)	1.5 (0.06)	1.5 (0.06)	0.009 (0.02)	30 (8)
G 1/2	11 (0.43)	2 (0.08)	1.5 (0.06)	0.018 (0.04)	70 (18)

Note: available also as "Sleeve valve for line mounting"
See data sheet RE 18316-02

Ordering code

GSU1

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Insert type - Restrictor with reverse flow check

Port sizes

= 14 G 1/4

= 38 G 3/8

= 12 G 1/2

	Standard hole diameter ØD mm (inches)		
	for port = 14	for port = 38	for port = 12
= 000	without hole	without hole	without hole
= 030	0.3 (0.012)	-	-
= 040	0.4 (0.016)	-	-
= 050	0.5 (0.02)	0.5 (0.02)	-
= 060	0.6 (0.024)	0.6 (0.024)	-
= 065	0.65 (0.026)	-	-
= 075	0.75 (0.03)	0.75 (0.03)	-
= 080	0.8 (0.031)	0.8 (0.031)	-
= 100	1 (0.039)	1 (0.039)	1 (0.039)
= 110	1.1 (0.043)	-	-
= 120	1.2 (0.047)	-	-
= 125	1.25 (0.049)	1.25 (0.049)	-
= 130	-	-	1.3 (0.051)
= 150	1.5 (0.059)	1.5 (0.059)	1.5 (0.059)
= 160	1.6 (0.063)	1.6 (0.063)	-
= 170	1.7 (0.067)	-	-
= 190	-	-	1.9 (0.075)
= 200	2 (0.079)	2 (0.079)	2 (0.079)
= 220	-	2.2 (0.087)	-
= 250	2.5 (0.098)	2.5 (0.098)	2.5 (0.098)
= 300	-	-	3 (0.12)

Type	Material number
GSU1.14.000	R932500211
GSU1.14.030	R932500212
GSU1.14.040	R932500213
GSU1.14.050	R932500683
GSU1.14.060	R932500684
GSU1.14.065	R932006081
GSU1.14.075	R932500214
GSU1.14.080	R932007455
GSU1.14.100	R932500215
GSU1.14.110	R932500216
GSU1.14.120	R932500217
GSU1.14.125	R932500218
GSU1.14.150	R932500219
GSU1.14.160	R932500220
GSU1.14.170	R932500221
GSU1.14.200	R932500222
GSU1.14.250	R932500223
GSU1.38.000	R932500224
GSU1.38.050	R932500225
GSU1.38.060	R932500226

Type	Material number
GSU1.38.075	R932500227
GSU1.38.080	R932500228
GSU1.38.100	R932500229
GSU1.38.125	R932500230
GSU1.38.150	R932500231
GSU1.38.160	R932500232
GSU1.38.200	R932500233
GSU1.38.220	R932500234
GSU1.38.250	R932500235
GSU1.12.000	R932500208
GSU1.12.100	R932500209
GSU1.12.130	R932500827
GSU1.12.150	R932500814
GSU1.12.190	R932500828
GSU1.12.200	R932500815
GSU1.12.250	R932500210
GSU1.12.300	R932500816

Insert Valves

Check

Designation	Description	Cavity	Code	Data sheet	Pages
Insert valve check poppet type	VUM1.025	Special	0TU6030099Z	RE 18329-51	551
Insert valve check poppet type	VUM1.050	Special	0TU6010099Z	RE 18329-52	553
Insert valve check poppet type	VUM1.060	Special	0TU6020099Z	RE 18329-53	555
Insert valve check poppet type	VUH1	Special	0TU50100YZ	RE 18329-61	557
Insert valve check poppet type	VUB1	Special	0TU30100YZ	RE 18329-65	559

Insert type Check, poppet type

Special cavity, 869

VUM1.025

OT.U6.03.00.99 - Z



2

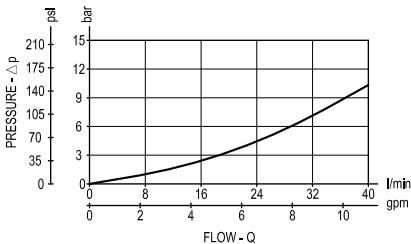


Description

When pressure at 1 rises above the spring bias pressure, the poppet is lifted and flow allowed from 1 to 2. The valve is closed (checked) from 2 to 1. Precision machining and hardening processes allow virtually leak-free performance in the checked condition.

Note: to obtain a good leak proof performance coin the cavity seat using a loose valve poppet (P/N 0F.S2.020) as a coining tool.
Impact energy: 4 ± 1 Nm.

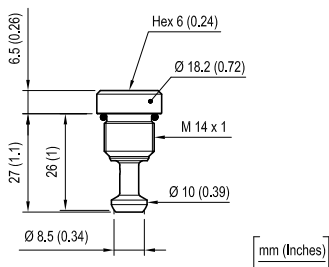
Performance



Technical data

Max. operating pressure	bar (psi)	380 (5500)
Max. flow	l/min. (gpm)	40 (11)
Max. internal leakage	drops/min.	5
Fluid temperature range	°C (°F)	-30 to 100 (-22 to 212)
Installation torque	Nm (ft-lbs)	30-35 (22-26)
Weight	kg (lbs)	0.03 (0.07)
Special cavity		869
Seal kit (*)	code material no.	RG0869020000100 R931002405
Fluids	Mineral-based or synthetics with lubricating properties at viscosities of 5 to 800 mm ² /s (cSt)	
Filtration	Nominal value max. 10µm (NAS 8) ISO 4406 19/17/14	
Installation	No restrictions	
Other Technical Data	See data sheet RE 18350-50	

(*) Only external seals for 10 valves



OT.U6.03.00.99		Z	*
pet type			Series 0/A to L unchanged performances and dimensions

[illegible]

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Insert type Check, poppet type

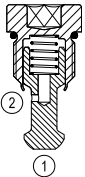
Special cavity, 730

VUM1.050

OT.U6.01.00.99 - Z



2

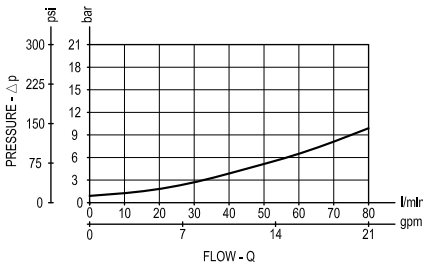


Description

When pressure at 1 rises above the spring bias pressure, the poppet is lifted and flow allowed from 1 to 2. The valve is closed (checked) from 2 to 1. Precision machining and hardening processes allow virtually leak-free performance in the checked condition.

Note: to obtain a good leak proof performance coin the cavity seat using a loose valve poppet (P/N 0F.S2.013) as a coining tool.
Impact energy: 4.5 ± 2 Nm.

Performance

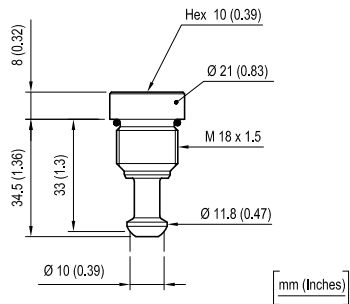


Technical data

Max. operating pressure	bar (psi)	380 (5500)
Max. flow	l/min. (gpm)	80 (21)
Max. internal leakage	drops/min.	5
Fluid temperature range	°C (°F)	-30 to 100 (-22 to 212)
Installation torque	Nm (ft-lbs)	35-40 (26-30)
Weight	kg (lbs)	0.05 (0.11)
Special cavity		730
Seal kit (*)	code material no.	RG0730020000100 R931002406
Fluids		Mineral-based or synthetics with lubricating properties at viscosities of 5 to 800 mm ² /s (cSt)
Filtration		Nominal value max. 10µm (NAS 8) ISO 4406 19/17/14
Installation		No restrictions
Other Technical Data		See data sheet RE 18350-50

(*) Only external seals for 10 valves

Dimensions



Ordering code

OT.U6.01.00.99		Z	*
Insert type - Check, poppet type		Series O/A to L unchanged performances and dimensions	
Special cavity, 730		SPRINGS	
		Cracking pressure bar (psi)	
		= 00	1 (15)

Type	Material number	Type	Material number
OTU601009900000	R901109792		

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Subject to change.

Insert type Check, poppet type

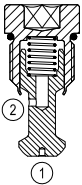
Special cavity, 808

VUM1.060

OT.U6.02.00.99 - Z



2

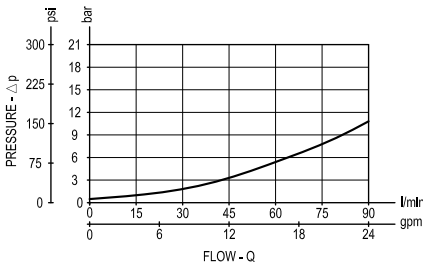


Description

When pressure at 1 rises above the spring bias pressure, the poppet is lifted and flow allowed from 1 to 2. The valve is closed (checked) from 2 to 1. Precision machining and hardening processes allow virtually leak-free performance in the checked condition.

Note: to obtain a good leak proof performance coin the cavity seat using a loose valve poppet (P/N 0F.S2.014) as a coining tool.
Impact energy: 5 ± 2 Nm.

Performance

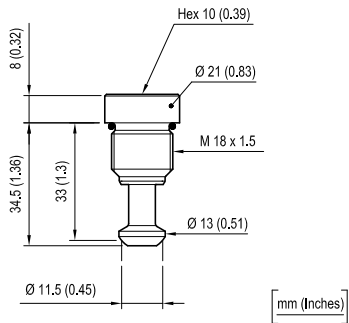


Technical data

Max. operating pressure	bar (psi)	380 (5500)
Max. flow	l/min. (gpm)	90 (24)
Max. internal leakage	drops/min.	5
Fluid temperature range	°C (°F)	-30 to 100 (-22 to 212)
Installation torque	Nm (ft-lbs)	35-40 (26-30)
Weight	kg (lbs)	0.06 (0.13)
Special cavity		808
Seal kit (*)	code material no.	RG0730020000100 R931002406
Fluids		Mineral-based or synthetics with lubricating properties at viscosities of 5 to 800 mm ² /s (cSt)
Filtration		Nominal value max. 10µm (NAS 8) ISO 4406 19/17/14
Installation		No restrictions
Other Technical Data		See data sheet RE 18350-50

(*) Only external seals for 10 valves

Dimensions



Ordering code

OT.U6.02.00.99		Z	*
Insert type - Check, poppet type		Series 0/A to L unchanged performances and dimensions	
Special cavity, 808		SPRINGS	
		Cracking pressure bar (psi)	
		= 00	0.5 (7)

Type	Material number	Type	Material number
OTU602009900000	R931002323		

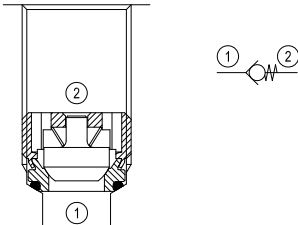
Insert type Check, poppet type



2

VUH1

OT.U5.01.00 - Y - Z

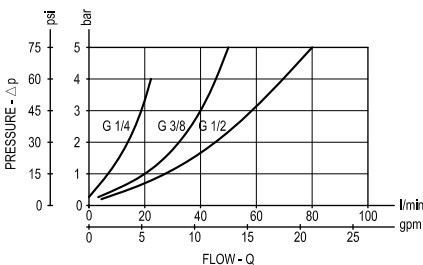


Description

When pressure at 1 rises above the spring bias pressure, the poppet is lifted and flow allowed from 1 to 2. The valve is closed (checked) from 2 to 1. Precision machining and hardening processes allow virtually leak-free performance in the checked condition.

Note: UNF and Metric versions available on request. Consult factory.

Performance

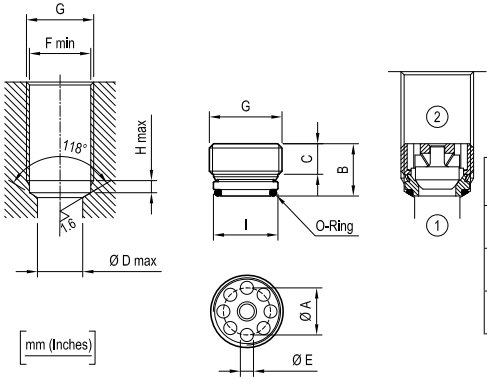


Technical data

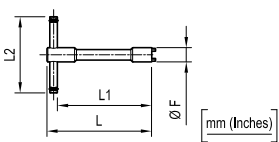
Max. operating pressure	bar (psi)	350 (5000)
Max. flow	l/min. (gpm)	see "performance" graph
Max. internal leakage	drops/min.	5
Fluid temperature range	°C (°F)	-30 to 100 (-22 to 212)
Installation torque	Nm (ft-lbs)	see "Dimensions" table
Weight	kg (lbs)	see "Dimensions" table
Special cavity		see "Dimensions"
Seal kit (*)	code material no.	see "Dimensions" table
Fluids		Mineral-based or synthetics with lubricating properties at viscosities of 5 to 800 mm ² /s (cSt)
Filtration		Nominal value max. 10µm (NAS 8) ISO 4406 19/17/14
Other Technical Data		See data sheet RE 18350-50

(*) Only external seals for 10 valves

Dimensions



Fitting tool dimensions



Type	F	L	L1	L2	Tool code	Material number
VUH1.G14	11.3 (0.45)	120 (4.72)	110 (4.33)	60 (2.36)	AVA17	R931002552
VUH1.G38	14.9 (0.59)	120 (4.72)	108 (4.25)	80 (3.15)	AVA17-01	R931002553
VUH1.G12	18.6 (0.73)	120 (4.72)	108 (4.25)	80 (3.15)	AVA17-02	R931002554

G	A	B	C	D	E	F	O-Ring dimensions	Seal kit	H	I	Weight kg (lbs)	Inst. torque Nm (ft-lbs)	Flow max. l/min. (gpm)
G 1/4	8.5 (0.34)	8.8 (0.35)	4.2 (0.17)	7 (0.28)	2.2 (0.09)	11.6 (0.46)	Ø 8.1x1.6 (0.32x0.06)	RG09UH010000100 R931002413	3 (0.12)	11.3 (0.45)	0.005 (0.011)	6 (4)	20 (5)
G 3/8	10.8 (0.43)	12 (0.47)	7 (0.28)	9 (0.35)	3 (0.12)	15.1 (0.6)	Ø 11x1.5 (0.43x0.06)	RG02UH010000100 R931002411	3 (0.12)	14.8 (0.58)	0.015 (0.033)	6 (4)	50 (13)
G 1/2	14.2 (0.56)	14.7 (0.58)	8 (0.32)	12 (0.47)	3.8 (0.15)	18.8 (0.74)	Ø 14x1.5 (0.55x0.06)	RG03UH010000100 R931002412	4.5 (0.18)	18.6 (0.73)	0.015 (0.033)	10 (7)	80 (21)

Ordering code

0T.U5.01.00	Y	Z	*
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Insert type - Check, poppet type

Port sizes

- = 09 G 1/4
- = 02 G 3/8
- = 03 G 1/2

Series 0/A to L
unchanged performances and dimensions

SPRINGS

Cracking pressure bar (psi)

= 00 < 0.5 (7)

Type	Material number
0TU501000200000	R901064101
0TU501000300000	R901087794
0TU501000900000	R900764338

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Type	Material number

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Subject to change.

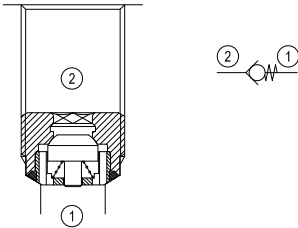
Insert type Check, poppet type



2

VUB1

OT.U3.01.00 - Y - Z

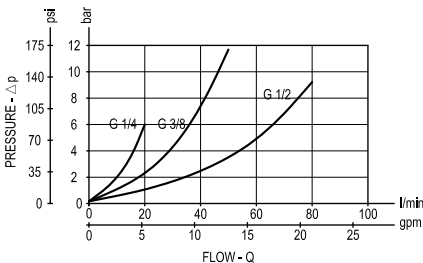


Description

When pressure at 2 rises above the spring bias pressure, the poppet is lifted and flow allowed from 2 to 1. The valve is closed (checked) from 1 to 2. Precision machining and hardening processes allow virtually leak-free performance in the checked condition.

Note: UNF and Metric versions available on request. Consult factory.

Performance

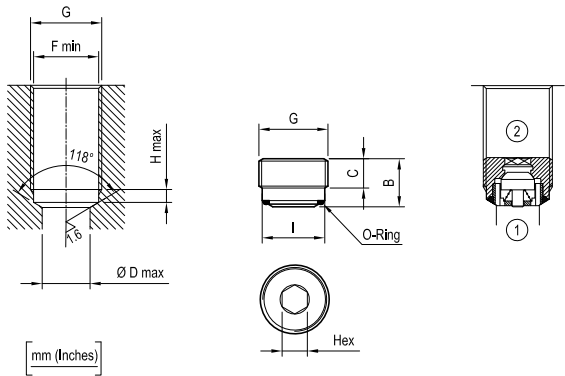


Technical data

Max. operating pressure	bar (psi)	350 (5000)
Max. flow	l/min. (gpm)	see "performance" graph
Max. internal leakage	drops/min.	5
Fluid temperature range	°C (°F)	-30 to 100 (-22 to 212)
Installation torque	Nm (ft-lbs)	see "Dimensions" table
Weight	kg (lbs)	see "Dimensions" table
Special cavity		see "Dimensions"
Seal kit (*)	code material no.	see "Dimensions" table
Fluids		Mineral-based or synthetics with lubricating properties at viscosities of 5 to 800 mm ² /s (cSt)
Filtration		Nominal value max. 10µm (NAS 8) ISO 4406 19/17/14
Other Technical Data		See data sheet RE 18350-50

(*) Only external seals for 10 valves

Dimensions



G	B	C	Hex.	D	I	F	O-Ring dimensions	O-Ring codes	H	Weight kg (lbs)	Inst. torque Nm (ft-lbs)	Flow max. l/min. (gpm)
G 1/4	10 (0.39)	6 (0.24)	6 (0.24)	7 (0.28)	11.5 (0.45)	11.6 (0.46)	Ø 9 x 1 (0.35x0.04)	RG09UB010000100 R931002410	3 (0.12)	0.005 (0.011)	15 (11)	20 (5)
G 3/8	11.5 (0.45)	7 (0.28)	6 (0.24)	9 (0.35)	14.95 (0.59)	15.1 (0.6)	Ø 11x1.5 (0.43x0.06)	RG02UB010000100 R931002408	3 (0.12)	0.015 (0.033)	20 (15)	50 (13)
G 1/2	13.5 (0.53)	8 (0.32)	8 (0.32)	12 (0.47)	18.7 (0.74)	18.8 (0.74)	Ø 14x1.5 (0.55x0.06)	RG03UB020000100 R931002409	3 (0.12)	0.020 (0.044)	20 (15)	80 (21)

Ordering code

OT.U3.01.00		Y	Z	*
<div>Insert type - Check, poppet type</div>		<div>Series 0/A to L unchanged performances and dimensions</div>		
<div>Port sizes</div> <div>= 09 G 1/4</div> <div>= 02 G 3/8</div> <div>= 03 G 1/2</div>		<div>SPRINGS</div> <div>Cracking pressure bar (psi)</div> <div>= 00 < 0.5 (7)</div>		

Type	Material number
OTU301000200000	R901106625
OTU301000300000	R901106626
OTU301000900000	R901071238

Type	Material number

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