



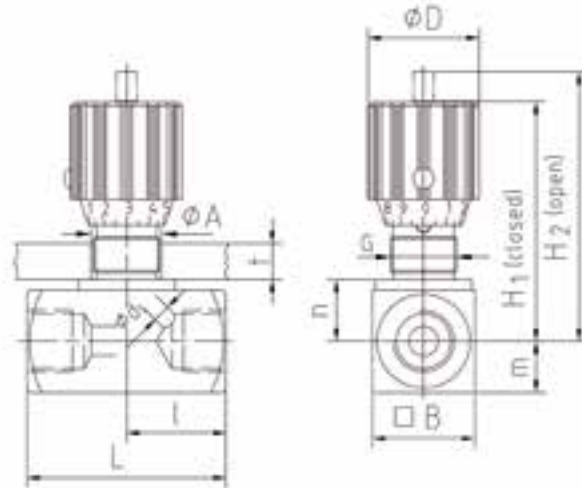
1945 - 2020



MHA ZENTGRAF
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CATALOG



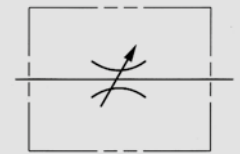
AVAILABLE SIZES

DN6 - DN40 (1/8" to 2")

CONNECTIONS

DIN ISO 228 Female thread,
ANSI B1.20.1 NPT Female thread,
SAE J 514 ISO/DIS 11926-1 Female thread

PORTING PATTERN



ACCESSORIES ON REQUEST

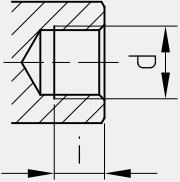
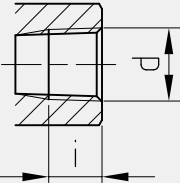
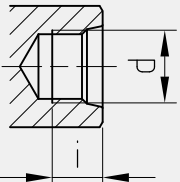
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MATERIAL CODE DESCRIPTION

Materials	1A	18	4A	48
Body	Steel	Steel	Stainless Steel	Stainless Steel
O-rings	NBR	FPM	NBR	FPM
Tmin /Tmax	-20°C / 100°C	-20°C / 100°C	-30°C / 100°C	-20°C / 100°C

GENERAL DIMENSIONS

Type	H ₁	H ₂	m	n	B	l	L	D	d ₁	A	G	t _{max}
NDV-DN6	51	56	8	10	16	19	38	24	3	13	Pg7	4
NDV-DN8	65	71	12,5	14,5	25	24	48	29	4	19	Pg11	7
NDV-DN10	68	75	15	17	30	29	58	29	5	19	Pg11	7
NDV-DN12	82	92	17,5	21	35	34	68	38	6	23	Pg16	7
NDV-DN16	96	106	22,5	26	45	39	78	38	8	23	Pg16	7
NDV-DN20	121	134	25	30	50	54	108	49	13,5	38	Pg29	10
NDV-DN25	126	139	30	35	60	54	108	49	13,5	38	Pg29	10
NDV-DN30	131	144	35	40	70	54	108	49	13,5	38	Pg29	10
NDV-DN40	141	154	45	50	90	60	120	49	13,5	38	Pg29	10

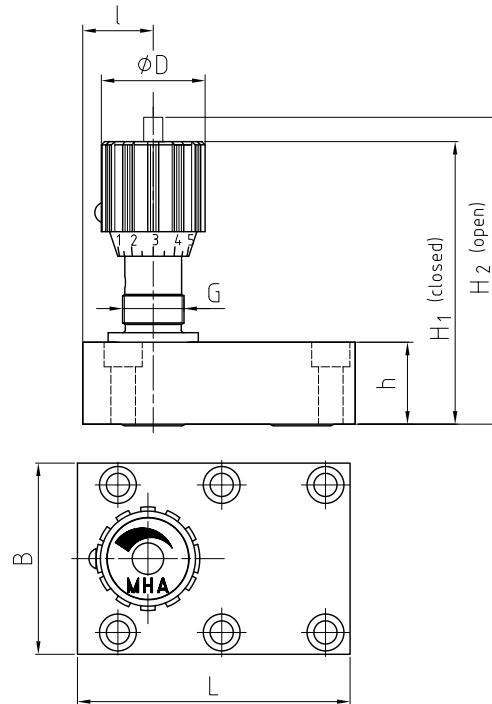
CONNECTION TYPE	DIMENSIONS				ORDER CODE PER MATERIAL COMBINATION				
	Type	i	d	Weight [Kg]	PN [bar]	1A	18	4A	48
DIN ISO 228 FEMALE THREAD 	NDV-DN6-G1/8	9	G1/8	0,12	350	26866*	30689*	33225	30108
	NDV-DN8-G1/4	12	G1/4	0,25	350	23791*	30655*	22084	09952
	NDV-DN10-G3/8	13,5	G3/8	0,40	350	18259*	11673*	20828	20476
	NDV-DN12-G1/2	14,5	G1/2	0,60	350	22827*	09792*	16243	22428
	NDV-DN16-G3/4	17,5	G3/4	1,10	350	28849*	30426*	16244	33051
	NDV-DN20-G1	19,5	G1	2,40	350	30726*	28618*	31240	37628
	NDV-DN25-G1 1/4	21,5	G1 1/4	2,80	350	30853*	31513*	32424	37629
	NDV-DN30-G1 1/2	23,5	G1 1/2	3,50	350	29461*	31639*	29724	37630
	NDV-DN40-G2	25,5	G2	6,24	350	41931*	40822*	41934	41935
	ANSI B1.20.1 NPT FEMALE THREAD 	NDV-DN6-1/8"NPT	9	1/8" NPT	0,12	350	30856*	37631*	37636
NDV-DN8-1/4"NPT		12	1/4" NPT	0,25	350	21346*	30744*	37637	37644
NDV-DN10-3/8"NPT		12	3/8" NPT	0,40	350	21347*	37632*	37638	32407
NDV-DN12-1/2"NPT		14	1/2" NPT	0,60	350	21348*	37633*	29585	37645
NDV-DN16-3/4"NPT		14	3/4" NPT	1,10	350	30861*	14585*	37639	30677
NDV-DN20-1"NPT		19,5	1" NPT	2,40	350	30863	37634	37640	32390
NDV-DN25-1 1/4"NPT		21	1 1/4" NPT	2,80	350	30865	28835	37641	37646
NDV-DN30-1 1/2"NPT		24	1 1/2" NPT	3,50	350	30866	37635	37642	37647
NDV-DN40-2"NPT		19,9	2" NPT	6,30	350	41932	41938	41936	41937
SAE J514/ISO/DIS11926-1 FEMALE THREAD 		NDV-DN8-7/16"UNF	13	7/16"-20 UNF	0,28	350	36257	37672	37673
	NDV-DN10-9/16"UNF	13,5	9/16"-18 UNF	0,42	350	37648	37649	37650	37651
	NDV-DN12-3/4"UNF	14	3/4"-16 UNF	0,69	350	37652	37653	37654	37655
	NDV-DN16-1 1/16"UN	20	1 1/16"-12 UN	1,14	350	37656	37657	37658	37659
	NDV-DN20-1 5/16"UN	20	1 5/16"-12 UN	2,19	350	37660	37661	37662	37663
	NDV-DN25-1 5/8"UN	20	1 5/8"-12 UN	2,89	350	37664	37665	37666	37667
	NDV-DN30-1 7/8"UN	20	1 7/8"-12 UN	3,70	350	37668	37669	37670	37671
	NDV-DN40-2 1/2"UN	20	2 1/2"-12 UN	6,30	350	41933	41939	41940	41941

Please note the pressure ratings of the tube connections!

*Article usually in stock.



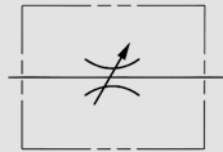
Flow control valves should not be used as shut-off device. Small leakage rates may occur in fully closed position. (DIN EN 12266 – leakage rate A-B – test medium water)



AVAILABLE SIZES

DN6 - DN30 (1/4" to 1 1/4")

PORTING PATTERN



ACCESSORIES ON REQUEST

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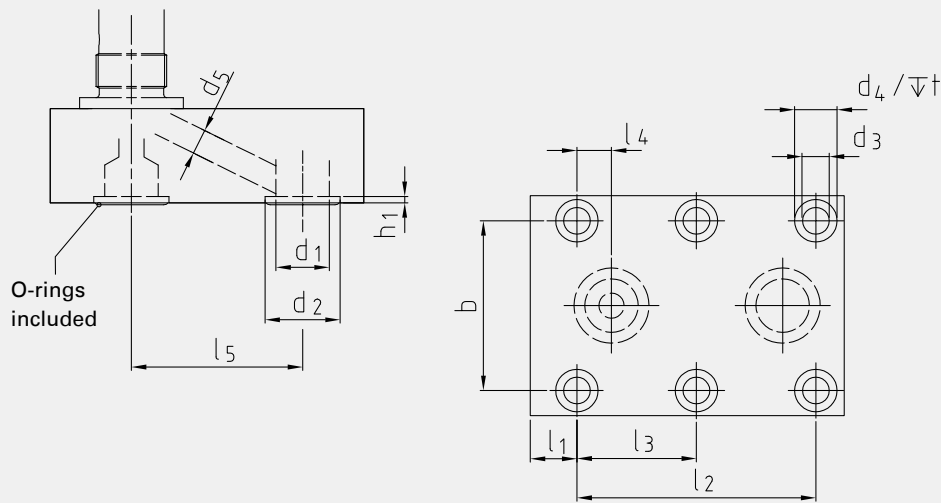
MATERIAL CODE DESCRIPTION

Materials	1A	18
Body	Steel	Steel
O-rings	NBR	FPM
Tmin / Tmax	-20°C / 100°C	-20°C / 100°C

GENERAL DIMENSIONS

Type	H ₁	H ₂	h	B	l	L	D	G	Weight [kg]
NDVP-DN6	59	64	16	41,5	9,5	35	24	Pg 7	0,20
NDVP-DN8	72	79	20	46	12	47,5	29	Pg 11	0,40
NDVP-DN10	78	84	25	51	14	51	29	Pg 11	0,60
NDVP-DN12	89	100	25	57,5	22,5	75	38	Pg 16	1,00
NDVP-DN16	103	113	30	70	19,5	93,5	38	Pg 16	1,50
NDVP-DN20	142	154	45	76,5	31,5	111	49	Pg 29	3,40
NDVP-DN25	142	154	45	100	49	143	49	Pg 29	5,15
NDVP-DN30	147	159	50	115	39	171	49	Pg 29	7,50

ASSEMBLY DIMENSIONS



ASSEMBLY DIMENSIONS

ORDER CODE PER MATERIAL COMBINATION

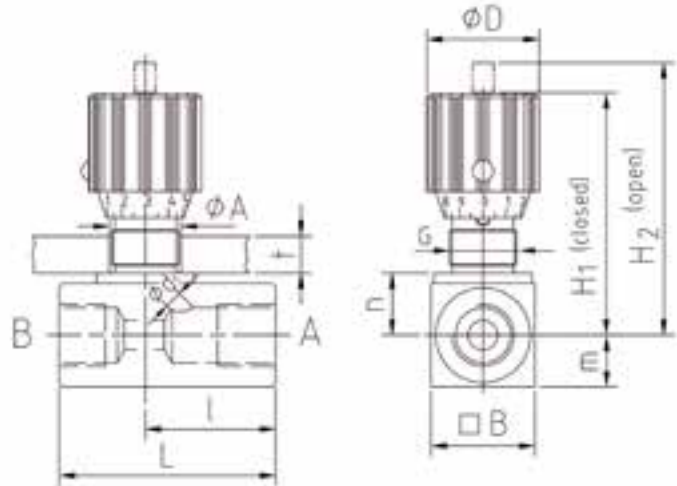
Type	b	l ₁	l ₂	l ₃	l ₄	l ₅	d ₁	d ₂	h ₁	d ₃	d ₄	t	d ₅	Dimension of screws (min) ⁽¹⁾	Torque of screws in Nm ⁽¹⁾	O-ring	PN [bar]	1A	18
NDVP-DN6	28,5	8	19	-	1,5	16	5	9,8	1,2	6,5	10,5	6,8	3	4 x M6x20 - 8.8	9	6,35x1,78	350	33580*	37734*
NDVP-DN8	33,5	6,5	35	-	4,5	25,5	7	12,4	1,5	6,5	10,5	6,8	4	4 x M6x25 - 8.8	9	8,5x2	350	13850*	37735*
NDVP-DN10	38	8,5	33,5	-	4,2	25,5	10	15,7	1,4	6,5	10,5	6,8	5	4 x M6x30 - 10.9	12	12x2	350	20313*	37736*
NDVP-DN12	44,5	18,5	38	-	4	30	13	18,7	1,4	6,5	10,5	6,8	6	4 x M6x30 - 12.9	14	15x2	350	16776*	37737*
NDVP-DN16	54	8,5	76	38	11	54,5	17	23,9	2	8,5	13,5	9	8	6 x M8x35 - 10.9	30	19x2,5	350	13852*	37738*
NDVP-DN20	60	8	95	47,5	19	57	22	30,5	2,2	8,5	13,5	9	13,5	6 x M8x50 - 12.9	35	25x3	350	33218*	22728*
NDVP-DN25	76	11	120,5	60	21	79,5	28,5	37,5	2,2	10,5	16,5	11	13,5	6 x M10x50 - 12.9	70	32x3	350	31132*	37739*
NDVP-DN30	92	15	143	71,5	24	95	35	43,5	2,2	13	19	13	13,5	6 x M12x60 - 10.9	100	38x3	350	32561*	37740*

⁽¹⁾ Fixing screws not included.

We recommend screws as per ISO4762 (DIN 912). The indicated property classes and torques represent our recommended guidelines at a friction coefficient of 14%.

*Article usually in stock.

⚠ Flow control valves should not be used as shut-off device. Small leakage rates may occur in fully closed position. (DIN EN 12266 – leakage rate A-B – test medium water)



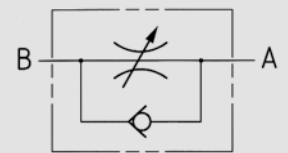
AVAILABLE SIZES

DN6 - DN40 (1/8" to 2")

CONNECTIONS

DIN ISO 228 Female thread,
ANSI B1.20.1 NPT Female thread,
SAE J 514 ISO/DIS 11926-1 Female thread

PORTING PATTERN



ACCESSORIES ON REQUEST

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MATERIAL CODE DESCRIPTION

Materials	1A	18	4A	48
Body	Steel	Steel	Stainless Steel	Stainless Steel
O-rings	NBR	FPM	NBR	FPM
Tmin /Tmax	-20°C / 100°C	-20°C / 100°C	-30°C / 100°C	-20°C / 100°C
Cracking pressure	0,5 bar*	0,5 bar*	0,5 bar*	0,5 bar*

*Option: Cracking pressure PÖ 4,5 bar

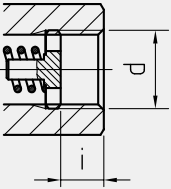
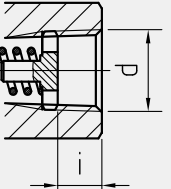
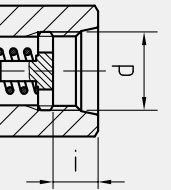
GENERAL DIMENSIONS

Type	H ₁	H ₂	m	n	B	l	L	D	d ₁	A	G	t _{max}
NDRV-DN6	51	56	8	10	16	26	45	24	3	13	Pg 7	4
NDRV-DN8	65	71	12,5	14,5	25	33,5	55	29	4	19	Pg 11	7
NDRV-DN10	68	75	15	17	30	41	65	29	5	19	Pg 11	7
NDRV-DN12	82	92	17,5	21	35	44	73	38	6	23	Pg 16	7
NDRV-DN16	96	106	22,5	26	45	57	88	38	8	23	Pg 16	7
NDRV-DN20	121	134	25	30	50	77	127	49	13,5	38	Pg 29	10
NDRV-DN25	126	139	30	35	60	93	143	49	13,5	38	Pg 29	10
NDRV-DN30	131	144	35	40	70	91	143	49	13,5	38	Pg 29	10
NDRV-DN40	141	154	45	50	90	111	165	49	13,5	38	Pg 29	10

**⚠ Due to spring and manufacturing tolerances
cracking pressures may deviate by ±30%.**

Flow control check valve for piping-system assembly Steel / Stainless Steel

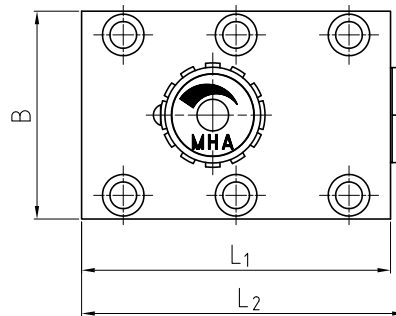
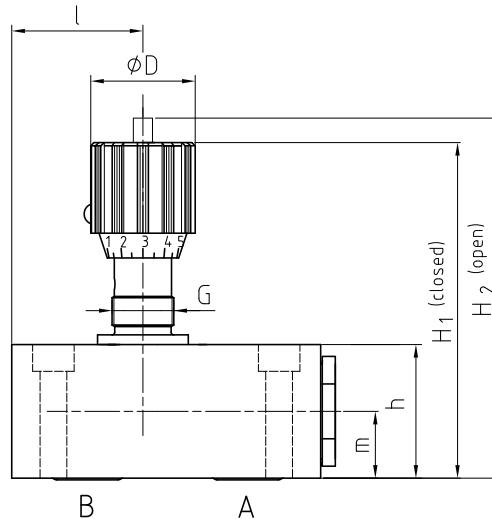
NDRV

CONNECTION TYPE	DIMENSIONS				ORDER CODE PER MATERIAL COMBINATION				
	Type	i	d	Weight [Kg]	PN [bar]	1A	18	4A	48
DIN ISO 228 FEMALE THREAD 	NDRV-DN6-G1/8	9	G1/8	0,10	350	26868*	30690*	37675	37676
	NDRV-DN8-G1/4	13	G1/4	0,30	350	19562*	30652*	10298	09934
	NDRV-DN10-G3/8	13,5	G3/8	0,45	350	21359*	30653*	18568	37677
	NDRV-DN12-G1/2	15,5	G1/2	0,70	350	22829*	30654*	30145	25847
	NDRV-DN16-G3/4	16,5	G3/4	1,26	350	28978*	21586*	15776	31353
	NDRV-DN20-G1	19,5	G1	2,60	350	28977*	29227*	32425	34418
	NDRV-DN25-G1 1/4	21,5	G1 1/4	3,70	350	30086*	30346*	15777	37678
	NDRV-DN30-G1 1/2	23,5	G1 1/2	4,76	350	29494*	31338*	37679	37680
	NDRV-DN40-G2	25,5	G2	8,52	350	30867*	32226*	37681	37682
	ANSI B1.20.1 NPT FEMALE THREAD 	NDRV-DN6-1/8"NPT	9	1/8"NPT	0,10	350	30993*	37683*	37684
NDRV-DN8-1/4"NPT		12	1/4"NPT	0,30	350	28480*	30558*	37686	26257
NDRV-DN10-3/8"NPT		12	3/8"NPT	0,45	350	24251*	37687*	37688	37689
NDRV-DN12-1/2"NPT		14	1/2"NPT	0,70	350	24519*	37690*	33600	28789
NDRV-DN16-3/4"NPT		16	3/4"NPT	1,26	350	30997*	37691*	30786	32525
NDRV-DN20-1"NPT		19,5	1"NPT	2,60	350	30998*	37692*	37693	37694
NDRV-DN25-1 1/4"NPT		21	1 1/4"NPT	3,70	350	31000*	37695*	37696	37697
NDRV-DN30-1 1/2"NPT		24	1 1/2"NPT	4,76	350	31001*	37698*	37699	37700
NDRV-DN40-2"NPT		25,5	2"NPT	8,52	350	31003*	37701*	37702	37703
SAE J514/ISO/DIS11926-1 FEMALE THREAD 		NDRV-DN8-7/16"UNF	13	7/16"-20 UNF	0,30	350	36102*	36486*	37706
	NDRV-DN10-9/16"UNF	13,5	9/16"-18 UNF	0,46	350	37708*	37709*	37710	37711
	NDRV-DN12-3/4"UNF	15,5	3/4"-16 UNF	0,72	350	37712*	34898*	37713	37714
	NDRV-DN16-1 1/16"UN	20	1 1/16"-12 UN	1,37	350	36068*	37715*	37716	37717
	NDRV-DN20-1 5/16"UN	20	1 5/16"-12 UN	2,66	350	37718	37719	37720	37721
	NDRV-DN25-1 5/8"UN	20	1 5/8"-12 UN	2,86	350	37722	37723	37724	37725
	NDRV-DN30-1 7/8"UN	20	1 7/8"-12 UN	4,45	350	37726	37727	37728	37729
	NDRV-DN40-2 1/2"UN	20	2 1/2"-12 UN	8,03	350	37730	37731	37732	37733

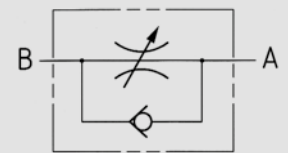
Please note the pressure ratings of the tube connections!

*Article usually in stock.

⚠ Flow control valves should not be used as shut-off device. Small leakage rates may occur in fully closed position. (DIN EN 12266 – leakage rate A-B – test medium water)



PORTING PATTERN



AVAILABLE SIZES

DN6 - DN40 (1/4" to 1 1/2")

ACCESSORIES ON REQUEST

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MATERIAL CODE DESCRIPTION

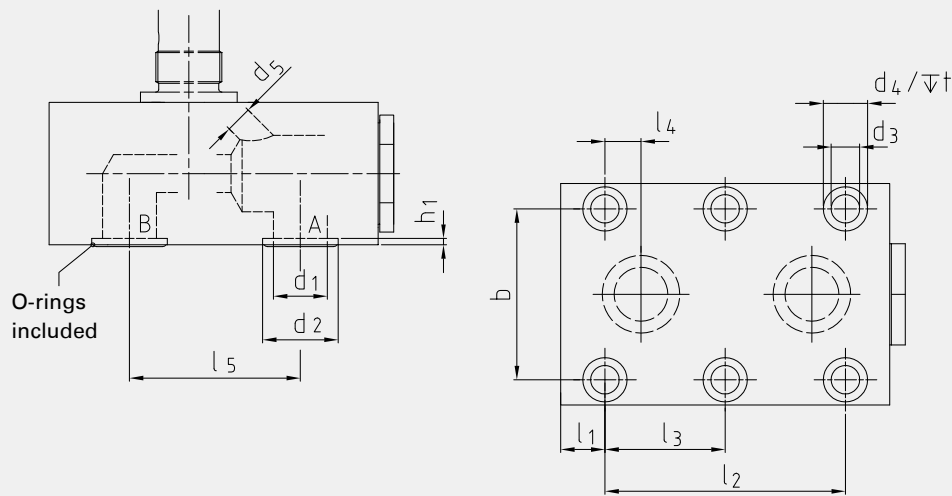
Materials	8A	88
Body	Steel	Steel
O-rings	NBR	FPM
Tmin /Tmax	-20°C / 100°C	-20°C / 100°C
Cracking pressure	0,5 bar*	0,5 bar*
*Option: Cracking pressure PÖ 4,5 bar		

GENERAL DIMENSIONS

Type	H ₁	H ₂	m	h	B	l	L ₁	L ₂	D	G	Weight [kg]
NDRVP-DN6	59	64	8	16	41,5	13,5	41,5	47	24	Pg 7	0,26
NDRVP-DN8	72	79	10	20	46	31	63,5	70	29	Pg 11	0,50
NDRVP-DN10	78	84	12,5	25	51	29,5	70	75	29	Pg 11	0,80
NDRVP-DN12	96	107	16	32	57,5	36,5	80	86	38	Pg 16	1,20
NDRVP-DN16	118	128	22,5	45	70	49	104	110	38	Pg 16	2,50
NDRVP-DN20	147	159	25	50	76,5	49	127	133	49	Pg 29	3,90
NDRVP-DN25	152	164	27,5	55	100	77	165,5	171	49	Pg 29	6,70
NDRVP-DN30	172	184	37,5	75	115	85	186	192	49	Pg 29	11,00
NDRVP-DN40	197	209	50	100	140	64	192,5	206	49	Pg 29	18,80

! Due to spring and manufacturing tolerances cracking pressures may deviate by ±30%.

ASSEMBLY DIMENSIONS



ASSEMBLY DIMENSIONS

ORDER CODE PER MATERIAL COMBINATION

Type	b	l ₁	l ₂	l ₃	l ₄	l ₅	d ₁	d ₂	h ₁	d ₃	d ₄	t	d ₅	Dimension of screws (min) ⁽¹⁾	Torque of screws in Nm ⁽¹⁾	O-ring	PN [bar]	8A	88
NDRVP-DN6	28,5	6,4	19	-	1,6	16	5	9,8	1,2	6,5	10,5	6,8	3	4x M6x20 - 8.8	9	6,35x1,78	350	31919*	17467*
NDRVP-DN8	33,5	14,2	35	-	4,5	25,5	7	12,4	1,4	6,5	10,5	6,8	3,5	4x M6x25 - 8.8	9	8,5x2	350	20318*	35034*
NDRVP-DN10	38	18	33,5	-	4	25,5	10	15,7	1,4	6,5	10,5	6,8	5	4x M6x30 - 10.9	12	12x2	350	18958*	19205*
NDRVP-DN12	44,5	21	38	-	4	30	13	18,7	1,4	6,5	10,5	6,8	6	4x M6x35 - 12.9	14	15x2	350	18959*	35035*
NDRVP-DN16	54	14	76	38	11,4	54	17	23,9	1,9	8,5	13,5	9	8	6x M8x50 - 10.9	30	19x2,5	350	19717*	35036*
NDRVP-DN20	60	16	95	47,5	19	57	22	30,5	2,2	8,5	13,5	9	13,5	6x M8x55 - 12.9	35	25x3	350	32987*	30945*
NDRVP-DN25	76	15	120	60	20,6	79,5	28,5	37,5	2,2	10,5	16,5	11	13,5	6x M10x60 - 12.9	70	32x3	350	31920*	35037*
NDRVP-DN30	92	15	143	71,5	23,8	95	35	43,5	2,2	13	19	13	13,5	6x M12x85 - 10.9	100	38x3	350	32563*	35038*
NDRVP-DN40	111	16	133,5	67	25,5	89	47,5	57,5	2,2	13	19	13	13,5	6x M12x110 - 12.9	130	52x3	350	34147*	35039*

⁽¹⁾ Fixing screws not included.

*Article usually in stock.

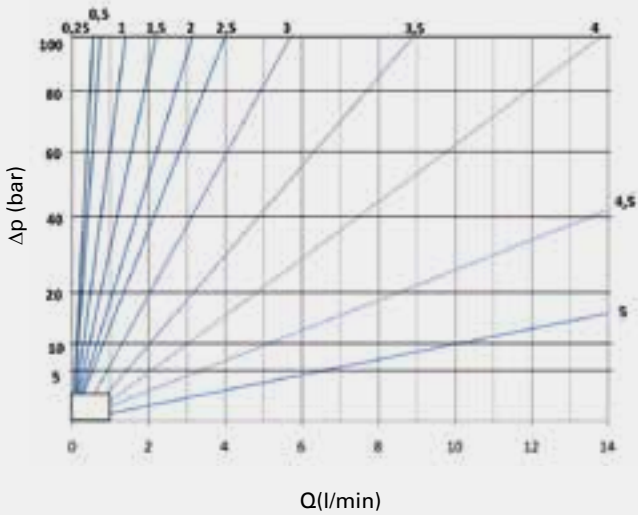
We recommend screws as per ISO4762 (DIN 912). The indicated property classes and torques represent our recommended guidelines at a friction coefficient of 14%.

⚠ Flow control valves should not be used as shut-off device. Small leakage rates may occur in fully closed position. (DIN EN 12266 - leakage rate A-B - test medium water) Leakage rate of check valve - DIN EN 12266 - leakage rate C-D

The flow values are valid for hydraulic oil (spissitude 880 kg/m³) and the kinematic viscosity ν of 35 mm²/s.

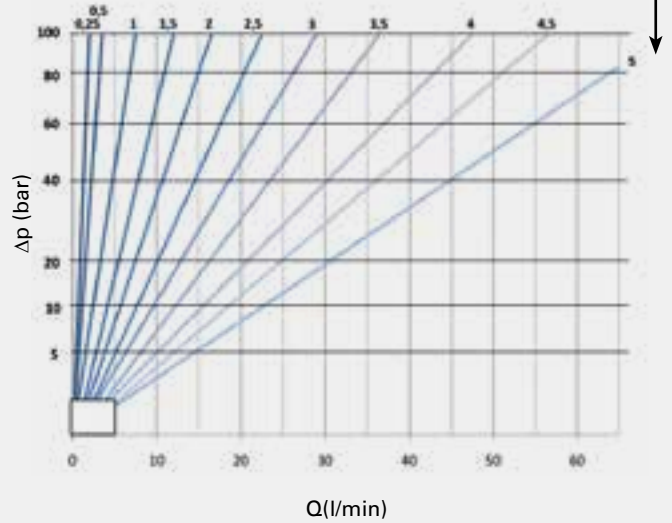
NDV/NDRV/NDVP/NDRVP-DN6

handle turns - the higher the number, the wider open the valve



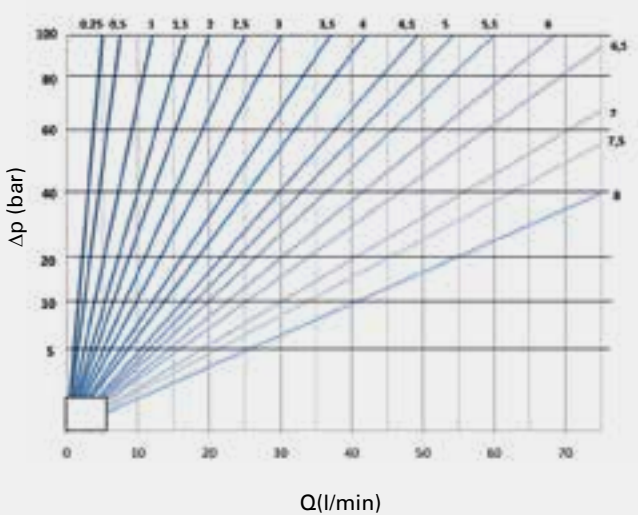
NDV/NDRV/NDVP/NDRVP-DN8

handle turns - the higher the number, the wider open the valve



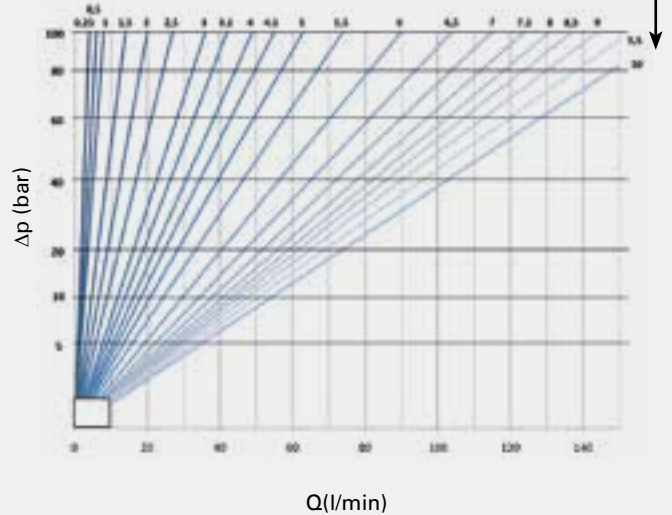
NDV/NDRV/NDVP/NDRVP-DN10

handle turns - the higher the number, the wider open the valve



NDV/NDRV/NDVP/NDRVP-DN12

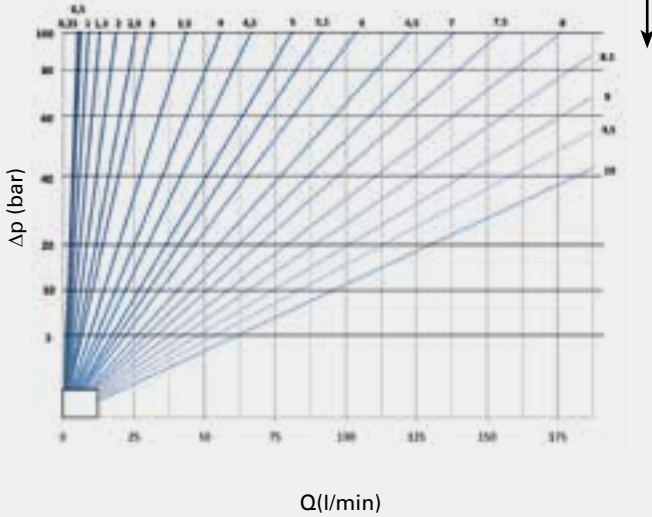
handle turns - the higher the number, the wider open the valve



The flow values are valid for hydraulic oil (spissitude 880 kg/m³) and the kinematic viscosity ν of 35 mm²/s.

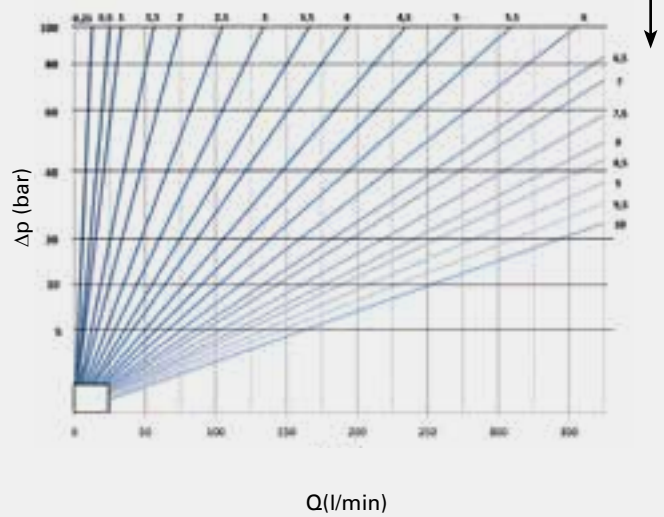
NDV/NDRV/NDVP/NDRVP-DN16

handle turns - the higher the number, the wider open the valve



NDV/NDRV/NDVP/NDRVP-DN20/25/30/40

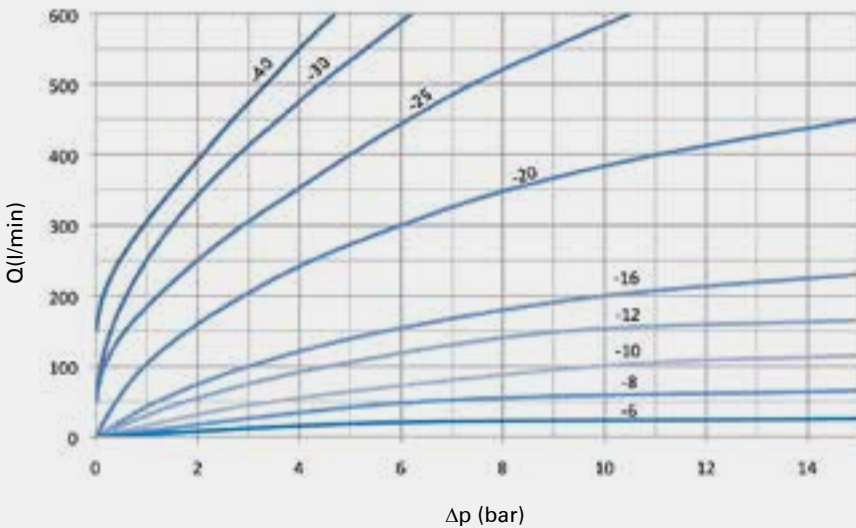
handle turns - the higher the number, the wider open the valve

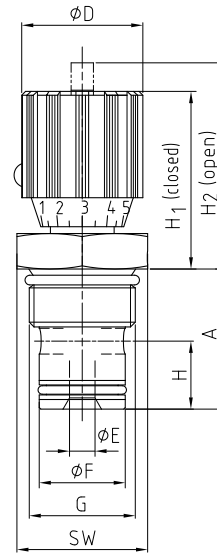


NDRV/NDRVP-DN6 - DN40

Flow direction: B-A

Δp characteristic line free flow through check valve





AVAILABLE SIZES

DN8 - DN16 (3/8" to 5/8")

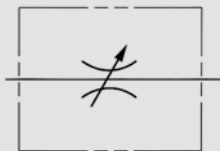
MATERIAL CODE DESCRIPTION

Materials	1A	18	4A	48
Body	Steel	Steel	Stainless Steel	Stainless Steel
O-rings	NBR	FPM	NBR	FPM
Tmin / Tmax	-20°C / 100°C	-20°C / 100°C	-30°C / 100°C	-20°C / 100°C

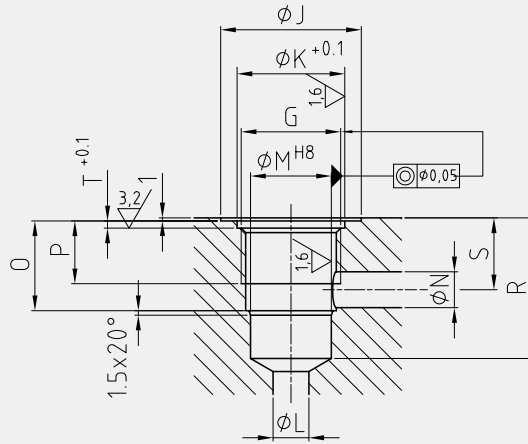
GENERAL DIMENSIONS

Type	H ₁	H ₂	H	A	E	F	SW	D	Weight [kg]
NDVE-DN8	41	47	12	27,5	5	14	27	29	0,15
NDVE-DN10	54	64	14,5	30,7	6	16	27	38	0,25
NDVE-DN12	55	65	17,5	40	8	19	32	38	0,50
NDVE-DN16	55	65	21,1	43,5	8	27	41	38	0,70

PORTING PATTERN



ASSEMBLY DIMENSIONS



ASSEMBLY DIMENSIONS												ORDER CODE PER MATERIAL COMBINATION				
Type	G ⁽¹⁾	J	K	L	M	N	O	P	R	S	T	PN [bar]	1A	18	4A	48
NDVE-DN8	G1/2	32	24	5	14	5	17,5	14	29	15	1,9	350	17280*	36703*	37741	20531
NDVE-DN10	G1/2	32	24	8	16	8	20,5	14	33	17	1,9	350	15132*	34216*	29470	30968
NDVE-DN12	G3/4	37	30	10	19	10	29	21	43	24	1,9	350	17266*	35285*	22599	11946
NDVE-DN16	G1	47	36	12	27	12	30	21	47	24	2,4	350	20312*	37742*	29471	12069

⁽¹⁾ As per DIN ISO228

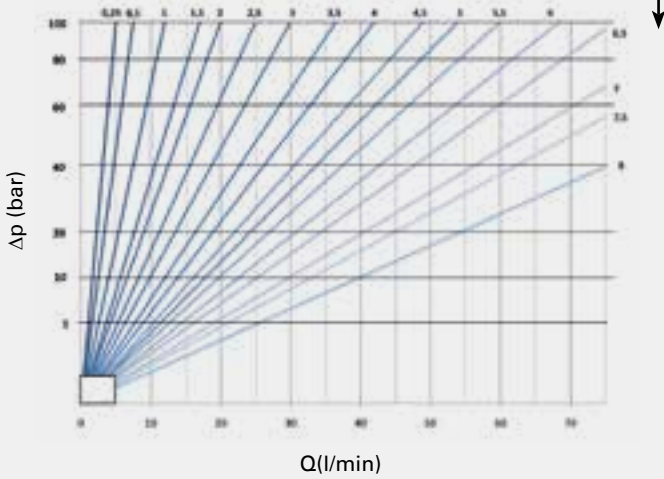
*Article usually in stock.

! Flow control valves should not be used as shut-off device. Small leakage rates may occur in fully closed position. (DIN EN 12266 – leakage rate A-B – test medium water)

The flow values are valid for hydraulic oil (spissitude 880 kg/m³) and the kinematic viscosity ν of 35 mm²/s.

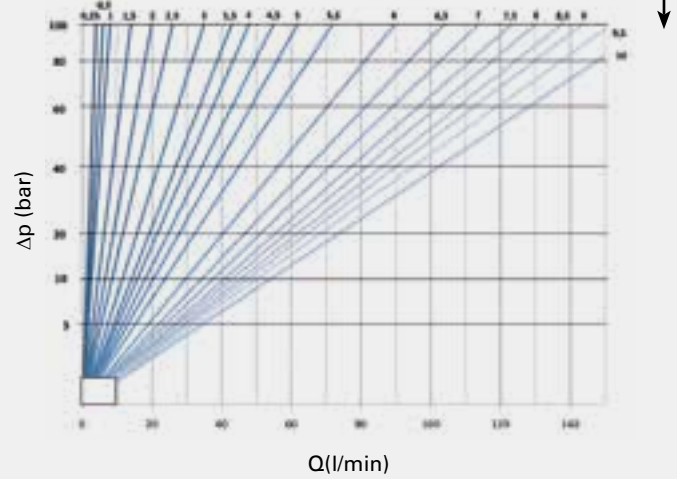
NDVE-DN8

handle turns - the higher the number, the wider open the valve



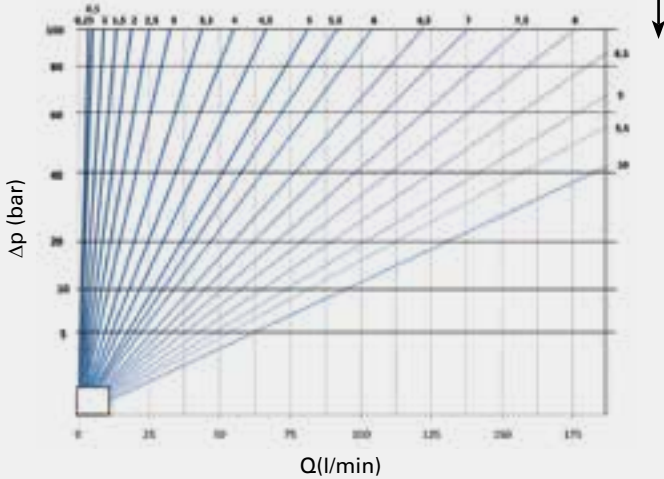
NDVE-DN10

handle turns - the higher the number, the wider open the valve

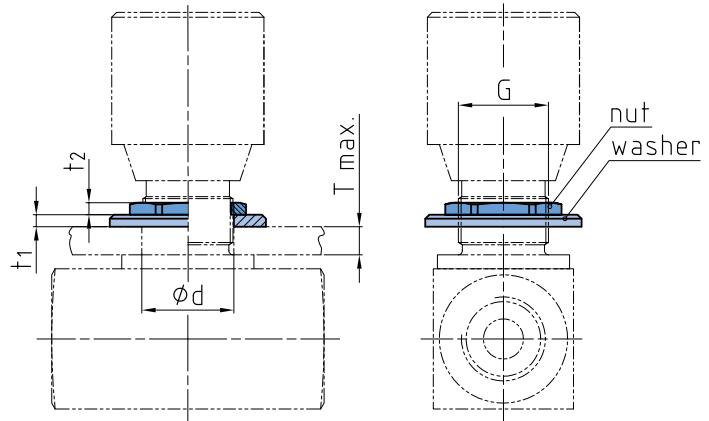


NDVE-DN12 - DN16

handle turns - the higher the number, the wider open the valve



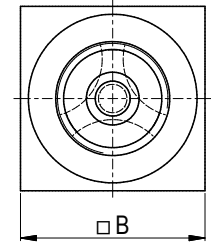
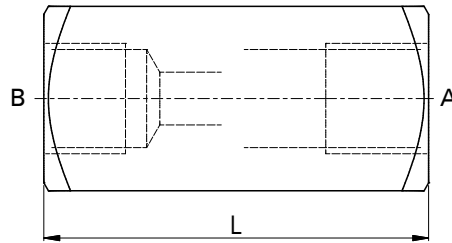
Panel mounting kits



Detailed valve dimensions: page 204 to 211

DIMENSIONS							ORDER CODE
Type	T _{max}	d	t ₁	t ₂	G*	Weight [kg]	
NDV/NDRV-DN6	4	13	2,5	2,8	PG7	0,01	28286
NDV/NDRV-DN8-10	7	19	3	3	PG11	0,02	10095
NDV/NDRV-DN12-16	7	23	3	3	PG16	0,02	10096
NDV/NDRV-DN20-25	10	38	5	4	PG29	0,09	10097

*PG thread as per DIN 40430



AVAILABLE SIZES

DN6 - DN40 (1/8" to 2")

CONNECTIONS

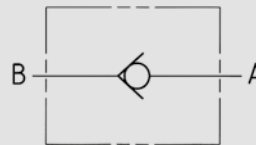
DIN ISO 228 Female thread,
ANSI B1.20.1 NPT Female thread,
SAE J 514 ISO/DIS 11926-1 Female thread

MATERIAL CODE DESCRIPTION

Materials	1	4
Body	Steel	Stainless Steel
Tmin /Tmax	-20°C / 100°C	-40°C / 100°C
Cracking pressure	0,5 bar*	0,5 bar*

*Option: Cracking pressure PÖ 4,5 bar

PORTING PATTERN



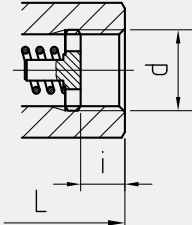
GENERAL DIMENSIONS

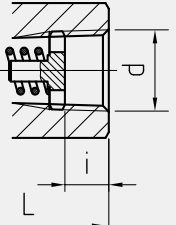
Type	B
RV-DN6	16
RV-DN8	25
RV-DN10	30
RV-DN12	35
RV-DN16	45
RV-DN20	50
RV-DN25	60
RV-DN30	70
RV-DN40	90

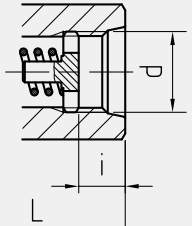
! Due to spring and manufacturing tolerances cracking pressures may deviate by ±30%.

Check valve for piping-system assembly Steel / Stainless steel

RV

CONNECTION TYPE	DIMENSIONS					ORDER CODE PER MATERIAL COMBINATION			
	Type	L	i	d	Weight [Kg]	PN [bar]	1	PN [bar]	4
DIN ISO 228 FEMALE THREAD 	RV-DN6-G1/8	45	9,5	G1/8	0,10	500	18680*	350	35030
	RV-DN8-G1/4	55	13,5	G1/4	0,20	500	18646*	350	33963
	RV-DN10-G3/8	65	13,5	G3/8	0,40	500	18681*	350	33962
	RV-DN12-G1/2	73	15,5	G1/2	0,70	500	18682*	350	24828
	RV-DN16-G3/4	88	17,5	G3/4	1,20	500	18683*	350	18321
	RV-DN20-G1	127	19,5	G1	2,00	500	18684*	350	28592
	RV-DN25-G1 1/4	143	21,5	G1 1/4	3,30	400	18685*	350	25355
	RV-DN30-G1 1/2	143	23,5	G1 1/2	4,20	350	18687*	350	77361
	RV-DN40-G2	165	25,5	G2	7,20	350	18689*	350	31615

ANSI B1.20.1 NPT FEMALE THREAD	DIMENSIONS					ORDER CODE PER MATERIAL COMBINATION			
	Type	L	i	d	Weight [Kg]	PN [bar]	1	PN [bar]	4
	RV-DN6-1/8"NPT	45	9	1/8"NPT	0,10	500	31006*	350	37753
	RV-DN8-1/4"NPT	55	12	1/4"NPT	0,20	500	26450*	350	29423
	RV-DN10-3/8"NPT	65	12	3/8"NPT	0,40	500	24442*	350	37754
	RV-DN12-1/2"NPT	73	14	1/2"NPT	0,60	500	30367*	350	31407
	RV-DN16-3/4"NPT	88	16	3/4"NPT	1,20	500	30640*	350	31408
	RV-DN20-1"NPT	127	19,5	1"NPT	2,00	500	26489	350	29909
	RV-DN25-1 1/4"NPT	143	21	1 1/4"NPT	3,00	400	26520	350	37755
	RV-DN30-1 1/2"NPT	143	24	1 1/2"NPT	4,20	350	26540	350	29524
	RV-DN40-2"NPT	165	25,5	2"NPT	8,00	350	25554	350	37756

SAE J514/ISO/DIS11926-1 FEMALE THREAD	DIMENSIONS					ORDER CODE PER MATERIAL COMBINATION			
	Type	L	i	d	Weight [Kg]	PN [bar]	1	PN [bar]	4
	RV-DN8-7/16"UNF	54,5	13	7/16"-20 UNF	0,20	500	26451	350	37757
	RV-DN10-9/16"UNF	65	13,5	9/16"-18 UNF	0,40	500	26459	350	37758
	RV-DN12-3/4"UNF	73	15,5	3/4"-16 UNF	0,60	500	26465	350	37759
	RV-DN16-1 1/16"UNF	97,5	20	1 1/16"-12 UN	1,20	500	26479	350	37760
	RV-DN20-1 5/16"UN	127,5	20	1 5/16"-12 UN	1,90	500	26490	350	37761
	RV-DN25-1 5/8"UN	141,5	20	1 5/8"-12 UN	3,00	400	26522	350	37762
	RV-DN30-1 7/8"UN	139,5	20	1 7/8"-12 UN	3,90	350	26541	350	37763
	RV-DN40-2 1/2"UN	165	20	2 1/2"-12 UN	7,60	350	31793	350	37764

Please note the pressure ratings of the tube connections!

*Article usually in stock.

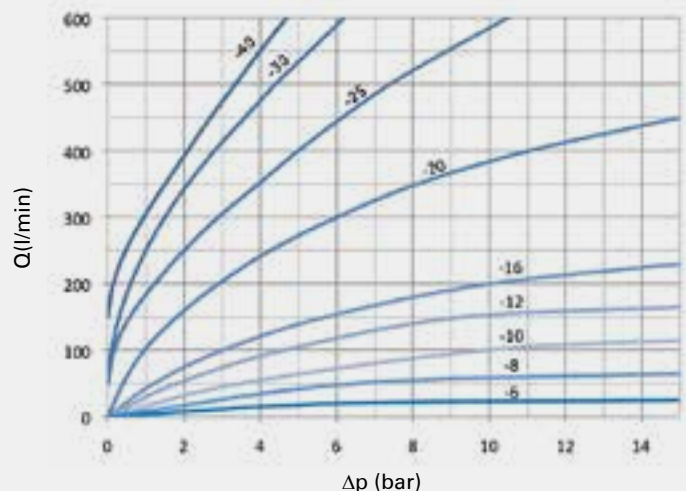
FLOW CHARACTERISTICS

The flow values are valid for hydraulic oil (spissitude 880 kg/m³) and the kinematic viscosity ν of 35 mm²/s.

Flow direction: B-A

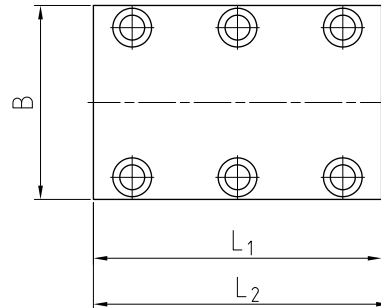
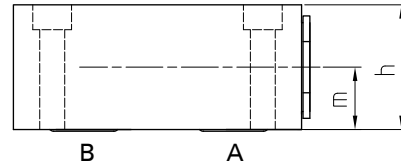
Δp characteristic line free flow through check valve

 **Leakage rate of check valve**
DIN EN 12266 – leakage rate C-D (test medium water)



Check valve for manifold mounting Steel

RVP



AVAILABLE SIZES

DN6 - DN40 (1/4" to 1 1/2")

MATERIAL CODE DESCRIPTION

Materials	83	85
Body	Steel	Steel
O-rings	NBR	FPM
Tmin /Tmax	-20°C / 100°C	-20°C / 100°C
Cracking pressure	0,5 bar*	0,5 bar*

*Option: Cracking pressure PÖ 4,5 bar

GENERAL DIMENSIONS

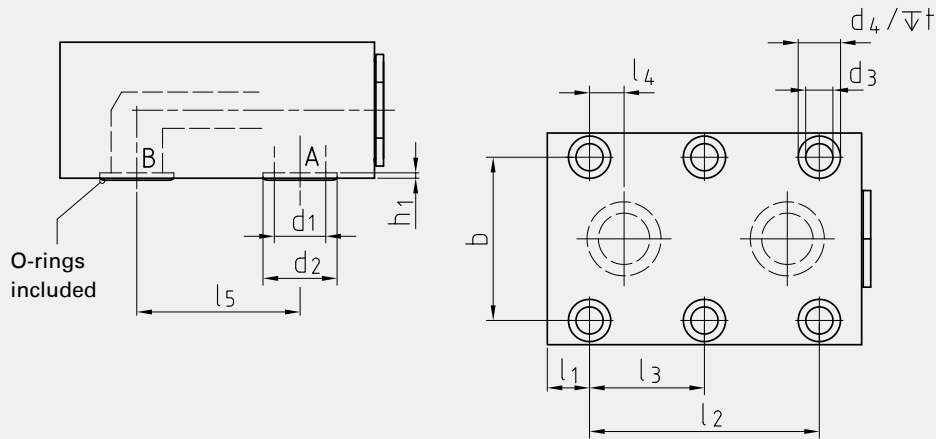
Type	m	h	B	L ₁	L ₂	Weight [kg]
RVP-DN6	8	16	41,5	41,5	47	0,20
RVP-DN8	10	20	46	63,5	70	0,40
RVP-DN10	12,5	25	51	70	75	0,63
RVP-DN12	16	32	57,5	80	86	1,06
RVP-DN16	22,5	45	70	104	110	2,23
RVP-DN20	25	50	76,5	127	133	3,33
RVP-DN25	27,5	55	100	165	171	5,80
RVP-DN30	37,5	75	115	186	192	10,89
RVP-DN40	50	100	140	192	206	18,20

PORTING PATTERN



⚠ Due to spring and manufacturing tolerances cracking pressures may deviate by ±30%.

ASSEMBLY DIMENSIONS



ASSEMBLY DIMENSIONS																	ORDER CODE PER MATERIAL COMBINATION		
Type	b	l ₁	l ₂	l ₃	l ₄	l ₅	d ₁	d ₂	h ₁	d ₃	d ₄	t	Dimension of screws (min) ⁽¹⁾	Torque of screws in Nm ⁽¹⁾	O-ring	PN [bar]	83	85	
RVP-DN6	28,5	6,4	19	-	1,6	16	5	9,8	1,2	6,5	10,5	6,8	4x M6x20 - 8.8	9	6,35x1,78	350	20321	37743	
RVP-DN8	33,5	14,2	35	-	4,5	25,5	7	12,4	1,4	6,5	10,5	6,8	4x M6x25 - 8.8	9	8,5x2	350	20322	37744	
RVP-DN10	38	18	33,5	-	4	25,5	10	15,7	1,4	6,5	10,5	6,8	4x M6x30 - 10.9	12	12x2	350	20323	37745	
RVP-DN12	44,5	21	38	-	4	30	13	18,7	1,4	6,5	10,5	6,8	4x M6x35 - 12.9	14	15x2	350	20324	37746	
RVP-DN16	54	14	76	38	11,4	54	17	23,9	1,9	8,5	13,5	9	6x M8x50 - 10.9	30	19x2,5	350	20325	37747	
RVP-DN20	60	16	95	47,5	19	57	22	30,5	2,2	8,5	13,5	9	6x M8x55 - 12.9	35	25x3	350	20326	37748	
RVP-DN25	76	15	120	60	20,6	79,5	28,5	37,5	2,2	10,5	16,5	11	6x M10x60 - 12.9	70	32x3	350	20327	37749	
RVP-DN30	92	15	143	71,5	23,8	95	35	43,5	2,2	13	19	13	6x M12x85 - 10.9	100	38x3	350	20328	37750	
RVP-DN40	111	16	133,5	67	25,5	89	47,5	57,5	2,2	13	19	13	6x M12x110 - 12.9	130	52x3	350	20329	37751	

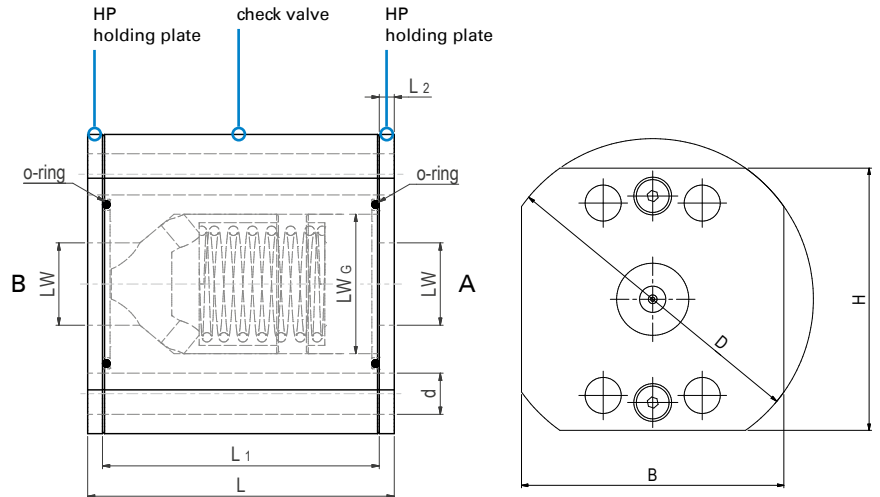
⁽¹⁾ Fixing screws not included.

We recommend screws as per ISO4762 (DIN 912). The indicated property classes and torques represent our recommended guidelines at a friction coefficient of 14%.

 **Leakage rate of check valve**
DIN EN 12266 – leakage rate C-D (test medium water)

Check valve with SAE adapter Steel / Stainless Steel

RVZ-SAE



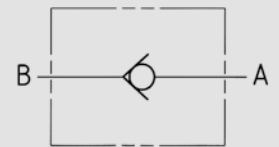
AVAILABLE SIZES

DN15 - DN50 (5/8" to 2")

CONNECTIONS

ISO 6162-1, ISO 6162-2

PORTING PATTERN



ACCESSORIES ON REQUEST

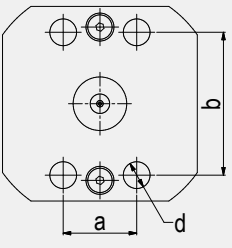
- Double flange pattern adapter plate page 224

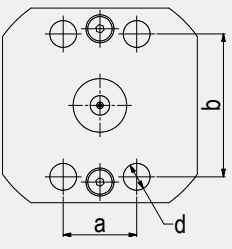
MATERIAL CODE DESCRIPTION

Materials	28p8	44p8
Body	Steel	Stainless Steel
Poppet	Steel	Stainless Steel
Seat	Polyurethane	Polyurethane
O-rings	FPM	FPM
Tmin /Tmax	-20°C / 100°C	-20°C / 100°C
Cracking pressure	2 bar	2 bar

GENERAL DIMENSIONS

Type	LW	LW _G	L	L ₁	D	B	H	PÖ [bar]
RVZ-DN15-SAE210	11	17,5	46	38	70	45	60	2
RVZ-DN20-SAE210	14,5	23	54	46	82	55	70	2
RVZ-DN25-SAE210	17	28	61	53	97	70	80	2
RVZ-DN32-SAE210	22	37,3	82	74	98	80	80	2
RVZ-DN40-SAE210	28	43	89	81	118	90	95	2
RVZ-DN50-SAE210	37	55	105	97	137	100	110	2
RVZ-DN15-SAE420	11	17,5	46	38	73	50	60	2
RVZ-DN20-SAE420	14,5	23	54	46	87	60	70	2
RVZ-DN25-SAE420	17	28	61	53	98	70	80	2
RVZ-DN32-SAE420	22	37,3	84	74	115	80	95	2
RVZ-DN40-SAE420	28	43	91	81	136	95	115	2
RVZ-DN50-SAE420	37	55	109	97	165	115	135	2

CONNECTION TYPE	DIMENSIONS					ORDER CODE PER MATERIAL COMBINATION		
	Type	a	b	d	Weight [Kg]	PN [bar]	28p8	44p8
	RVZ-DN15-SAE210	17,5	38,1	9	1,10	210	55424	on request
	RVZ-DN20-SAE210	22,2	47,6	11	1,50	210	55425	on request
	RVZ-DN25-SAE210	26,2	52,4	11	2,30	210	55394	on request
	RVZ-DN32-SAE210	30,2	58,7	11	3,45	210	55395*	on request
	RVZ-DN40-SAE210	35,7	69,9	13	4,85	210	54350	on request
	RVZ-DN50-SAE210	42,9	77,8	13	7,80	210	55426	on request

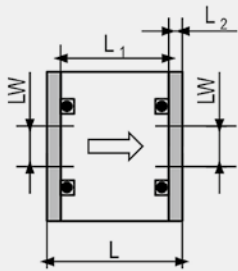
CONNECTION TYPE	DIMENSIONS					ORDER CODE PER MATERIAL COMBINATION		
	Type	a	b	d	Weight [Kg]	PN [bar]	28p8	44p8
	RVZ-DN15-SAE420	18,2	40,5	9	1,10	420	55732	on request
	RVZ-DN20-SAE420	23,8	50,8	11	1,50	420	55731	on request
	RVZ-DN25-SAE420	27,8	57,2	13	2,30	420	55721	on request
	RVZ-DN32-SAE420	31,8	66,7	13	3,45	420	55716	on request
	RVZ-DN40-SAE420	36,5	79,4	17	4,85	420	55022	on request
	RVZ-DN50-SAE420	44,5	96,8	22	7,80	420	55726	on request

Scope of delivery

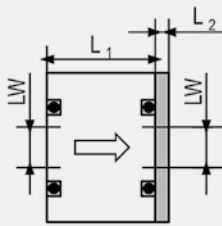
- Check valve + 2 O-rings + 2 holding plates
- Adapter plate has to be ordered separately (see next page)
- Standard cracking pressure 2 bar, further cracking pressures on request

* Only for metric screws,
for UNC screws on request.

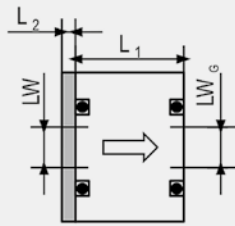
OPTIONS THAT CAN BE REALIZED WITH SCOPE OF DELIVERY



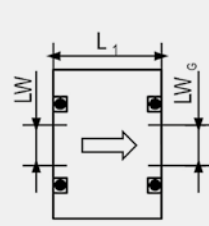
Option A
without seals



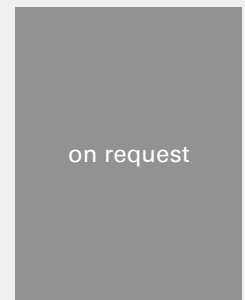
Option B
inlet side sealed



Option C
outlet side sealed



Option D
seals on both sides



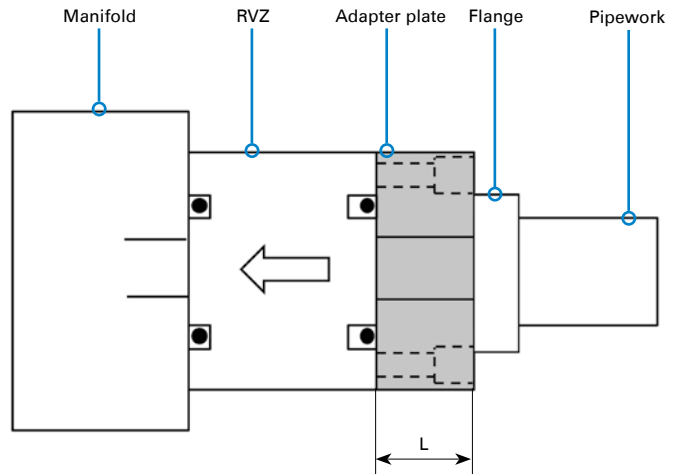
Option E
with threaded holes

! Due to spring and manufacturing tolerances
cracking pressures may deviate by $\pm 30\%$.

! Leakage rate of check valve
DIN EN 12266 leakage rate A - no visually noticeable leakage during the duration of the test with fluid or air.

RVZ double flange pattern adapter plate Steel / Stainless Steel

RVZ-SAE



MATERIAL CODE DESCRIPTION



Materials	1	4
Body	Steel	Stainless Steel (on request)

The adapter plate expands the functional range of the RVZ with additional threaded connections. Through that it is (for example) possible to remove a connected pipe from the RVZ without removing the RVZ from the manifold it is attached to.

DIMENSIONS ISO 6162-1/SAE210

ORDER CODE PER MATERIAL

Connection	DN	L	PN (bar)	ORDER CODE PER MATERIAL	
				1	4
SAE210	15	23	210	03057850	on request
SAE210	20	29	210	03055443	on request
SAE210	25	29	210	03055444	03059469
SAE210	32	33	210	03055445	on request
SAE210	40	33	210	03055446	on request
SAE210	50	33	210	03055447	03067103

DIMENSIONS ISO 6162-2/SAE420

ORDER CODE PER MATERIAL

Connection	DN	L	PN (bar)	ORDER CODE PER MATERIAL	
				1	4
SAE420	15	on request	420	on request	on request
SAE420	20	29	420	on request	03068767
SAE420	25	on request	420	on request	on request
SAE420	32	on request	420	on request	on request
SAE420	40	39	420	03057860	on request
SAE420	50	49	420	03064160	on request

FLOW CHARACTERISTICS

