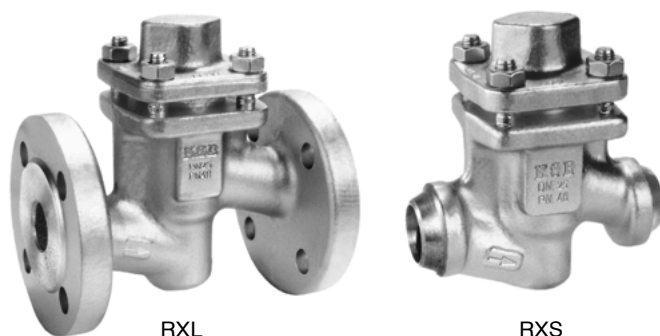


Non-return valves



flanged
or with butt or socket
weld ends

PN 25/40
DN 10-300

Application

- In industrial plants, building service industry, power stations and marine engineering.
- For water, steam, gas and other non-aggressive media.
- Other applications on request.

Operating data

- Maximum allowable pressure 40 bar
- Maximum allowable temperature 450 °C
- Pressure-temperature ratings see next side

Materials

- Flanged design
DN 10-40 forged steel P 250 GH ¹⁾ - 1.0460
DN 50-300 cast steel, GP 240 GH ²⁾ - 1.0619+N
- Weld end design
DN 10-50 forged steel P 250 GH ¹⁾ - 1.0460
DN 65-300 cast steel, GP 240 GH ²⁾ - 1.0619+N
- For further details see table of materials

Design

- Straight-way pattern with vertical bonnet
- Check cone
- Closing spring
- Inside and outside confined bonnet gasket
- Seats made of wear-resistant and corrosion-proof Cr-steel or CrNi-steel
- EC type tested (Module H), component mark TÜ.A./AR-290
- Exterior finish: blue RAL 5002

¹⁾ previously: C 22.8

²⁾ previously: GS-C 25 N

The valves meet the safety requirements of the Pressure Equipment Directive 97/23/EC (PED) of annex I for fluids of the groups 1 and 2.

Standard variants

- Studs/hex. nuts in A4-70 (low temperature)
- Free from oil and grease (parts in contact with flow medium)
- Free from oil and grease for handling oxygen
- Other flange and butt-weld end designs
- Acceptance tests to technical codes such as TRD/TRB/AD2000 or customer specification

Remarks

- NORI® 40 globe valves with gland, with rotating stem, type ZXL/ZXS according to type series booklet: 7621.1
- NORI® 40 globe valves with gland, with non-rotating stem, type ZXLf/ZXSf according to type series booklet: 7622.1
- NORI® 40 globe valves with bellows, with two-piece stem, type ZXLBV/ZXLB, ZXSbV/ZXSb according to type series booklet: 7165.1
- Operating instructions: 0570.82

On all enquiries / orders please specify

- | | |
|-------------------------|-------------------------------|
| 1 Type | 6 Medium |
| 2 PN | 7 Operating temperature |
| 3 DN | 8 Pipe connection |
| 4 Working pressure | 9 Variants |
| 5 Differential pressure | 10 Type series booklet number |

The valves do not have a potential internal source of ignition and can be used in potentially explosive atmospheres, group II, category 2 (zones 1+21) and category 3 (zones 2+22) according to ATEX 94/9/EC.



Pressure-Temperature ratings

Nom. pressure PN	Material	Working pressures at temperatures in °C 1)						
		-10 to +120	200	250	300	350	400	450
25	P 250 GH) 1.0460 2)	25	22	20	17	16	13	8
40	GP 240 GH 1.0619 3)	40	35	32	28	24	21	13

1) The valves can be used down to -10 °C

2) previously: C 22.8

3) previously: GS-C25N

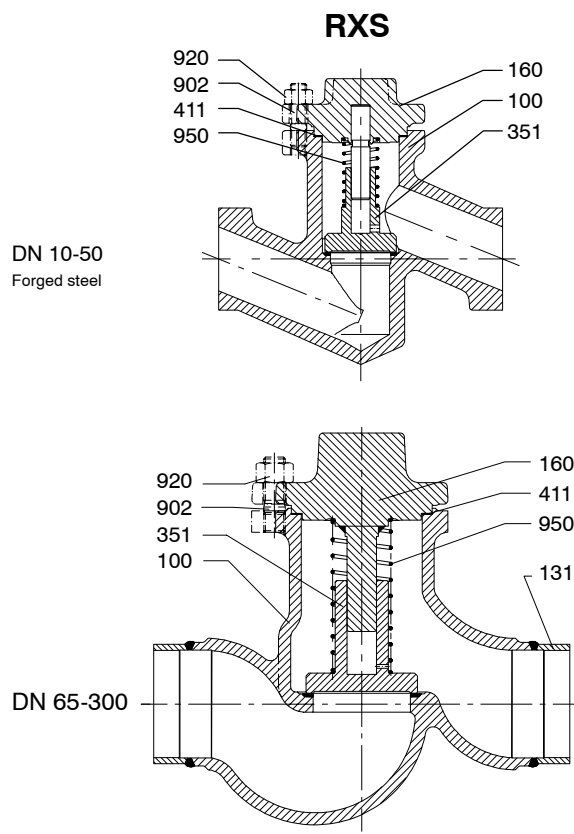
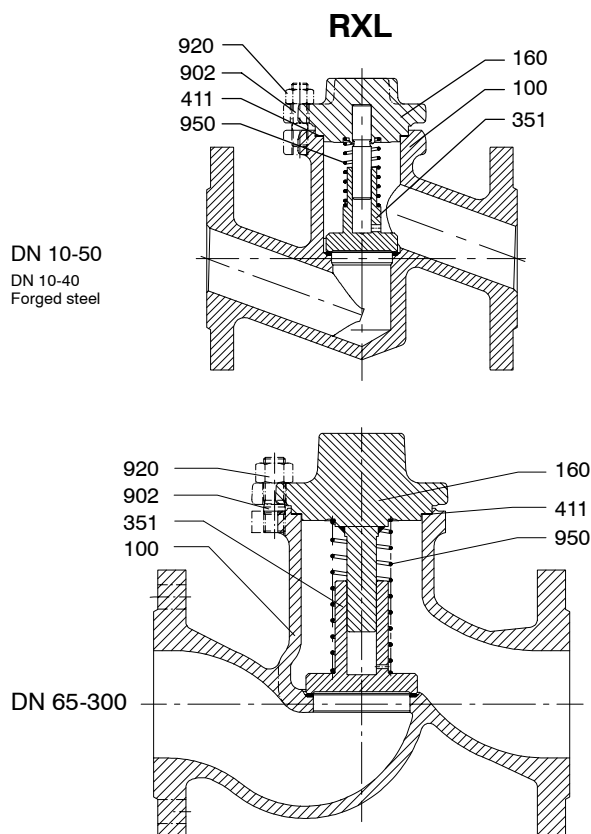
Operating pressures to EN 1092/1 are also permissible

Installation

Non-return valves are installed in the line so that the medium enters the valve underneath the cone and flows out above it.

Minimum opening pressure

DN 10-50 0.15 bar
DN 65-300 0.07 bar



Materials

Part no.	Name of parts	Material	DN	Remarks
100	Body	P 250 GH 1.0460	DN 10-40 type RXL DN 10-50 type RXS	Stainless steel hard-faced (1.4370)
		GP 240 GH 1.0619	DN 50-300 type RXL DN 65-300 type RXS	
131	Connection branch	P 235 GH 1.0305	DN 65-300 type RXS	
160	Cover	P 250 GH 1.0460	10-200	
		GP 240 GH 1.0619	250-300	
351*)	Check cone	X 6 CrNiMoTi 17 12 2 1.4571	10-50	
		X 20 Cr 13 1.4021	65-100	
		P 250 GH 1.0460	125-300	with hard faced (1.4115)
411*)	Gasket	CrNi-steel/graphite	10-300	
902	Stud	21 CrMoV 5-7 1.7709	10-100	Olive-chromated
920	Hex. nut	C35E 1.1181	125-300	
		24CrMo5 1.7258	10-100	
		C35E 1.1181	125-300	
950*)	Spring	X 5 CrNiMo 17-12-2 1.4401	10-50	
		X 12 CrNi 177 1.4310	65-100	
		Spring steel B 1.060	125-300	

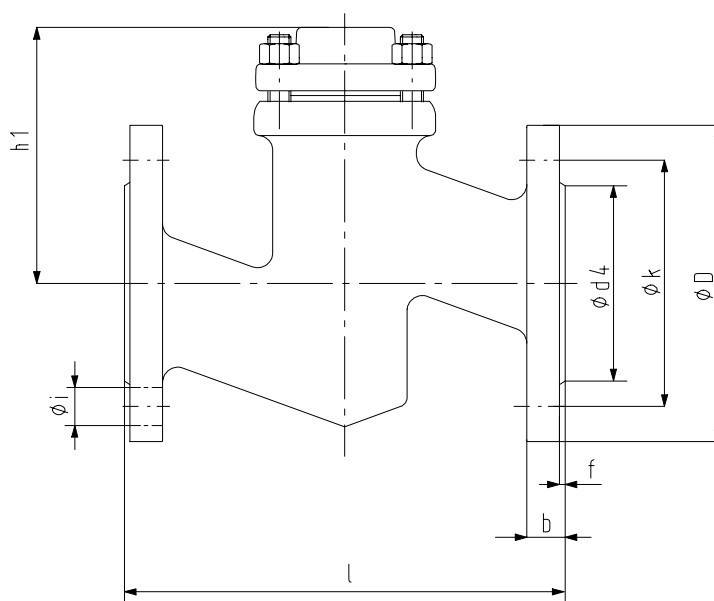
*) Recommended spare parts

Dimensions type RXL

Face-to-face dimension: - DIN EN 558 1/1
(previously: DIN 3202/F1)
ISO 5752/T1

Flange: - connection dimensions to
DIN 2501, ISO 2084, BS 4504
- raised face type C DIN 2526

Other flange designs:
e.g. grooved both ends type N, tongue type F DIN 2512,
recessed (female face) type R13, spigot (male face) type V13
DIN 2513, type D, type E DIN 2526
Flanges to EN 1092/1
Other flange designs on request.



Dimensions in mm

Nom. pressure PN	Nom. bore DN	Face-to-face dimension l	Flange diam. øD	Bolt circle øk	Number of bolt holes z	Bolt hole diameter øi	Raised face diameter ød ₄ x f	Flange thickness b	Centre-to-top height h ₁	Weight approx. kg
25/40	10	130	90	60	4	14	40 x 2	16	85	2.6
	15	130	95	65	4	14	45 x 2	16	85	3.2
	20	150	105	75	4	14	58 x 2	18	105	4.0
	25	160	115	85	4	14	68 x 2	18	105	4.7
	32	180	140	100	4	18	78 x 2	18	115	7.9
	40	200	150	110	4	18	88 x 3	18	120	9.3
	50	230	165	125	4	18	102 x 3	20	135	12.1
	65	290	185	145	8	18	122 x 3	22	173	17.0
	80	310	200	160	8	18	138 x 3	24	202	27.0
	100	350	235	190	8	22	162 x 3	24	234	33.0
	125	400	270	220	8	26	188 x 3	26	200	48.0
	150	480	300	250	8	26	218 x 3	28	220	65.0
25	200	600	360	310	12	26	278 x 3	30	270	120.0
	250	730	425	370	12	30	335 x 3	32	310	205.0
	300	850	485	430	16	30	395 x 4	34	340	310.0
40	200	600	375	320	12	30	285 x 3	34	270	160.0
	250	730	450	385	12	33	345 x 3	38	310	240.0
	300	850	515	450	16	33	410 x 4	42	340	350.0

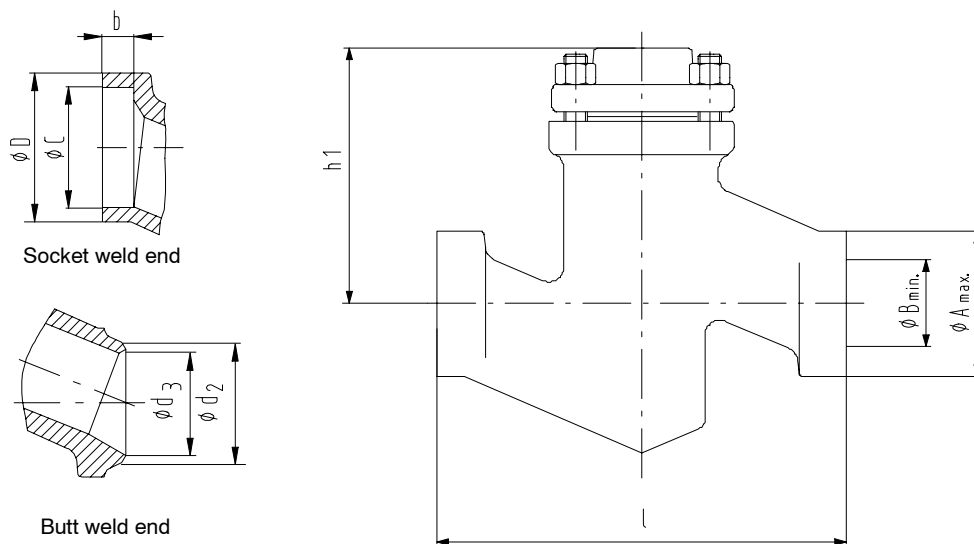
Dimensions type RXS

Face-to-face dimension: – to DIN 3202-S2

Butt-weld ends: – butt-weld ends DIN 3239-Form 1
– Groove form to DIN 2559-21

Different designs of butt-weld ends, socket-weld ends and welding groove forms are possible, but only within the dimensions $A_{max.}$ and $B_{min.}$.

Butt weld ends to EN 12627 or socket weld ends to EN 12760 possible.



Dimensions in mm

Nom. pressure PN	Nom. bore DN	Face-to-face dimension l	Butt-weld ends not machined		Butt-weld ends to DIN 3239-Form 1 Groove forms to DIN 2559-21			Socket weld ends to ANSI B 16.11 DIN 3239 T2			Centre-to-top height h 1	Weight approx. kg
			$\phi A_{max.}$	$\phi B_{min.}$	ϕd_2	$\phi d_3^{*)}$	Associated pipe dimensions	$\phi D_{-0.5}$	$\phi C^{+0.2}$	$b_{min.}$		
25/40	10	130	44	10	18	13	17.2 x 2.0	25	17.6	9.5	105	2.0
	15	130	44	15	22	17	21.3 x 2.0	30.5	21.7	9.5	105	2.0
	20	130	44	20	28	22	26.9 x 2.3	36.5	27.1	12.7	105	2.0
	25	130	44	24	34	28.5	33.7 x 2.6	44.5	33.8	12.7	105	2.0
	32	160	60	33	43	37	42.4 x 2.6	53.5	42.5	12.7	120	5.5
	40	180	60	38	49	43	48.3 x 2.6	60.5	48.7	12.7	120	5.5
	50	210	73	48	61	54	60.3 x 3.2	73.5	61.1	15.9	135	7.5
	65	290	76.1	64.9	76.1	69	76.1 x 3.6				173	13.0
	80	310	88.9	79.9	88.9	81	88.9 x 4.0				202	20.0
	100	350	114.3	100.1	114.3	104	114.3 x 5.0				234	40.0
	125	400	139.7	125.5	139.7	130.5	139.7 x 4.5				200	60.0
	150	480	168.3	148.3	168.3	156.5	168.3 x 5.6				220	80.0
	200	600	219.1	199.1	219.1	204.5	219.1 x 7.1				270	130.0
	250	730	273	251	273	256.5	273.0 x 8.0				310	200.0
	300	950	345	305	323.9	306.5	323.9 x 8.0				340	285.0

*) $\phi d_3 = d_p$ to DIN 3239

Subject to technical modification without prior notice

01.02.2006

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