

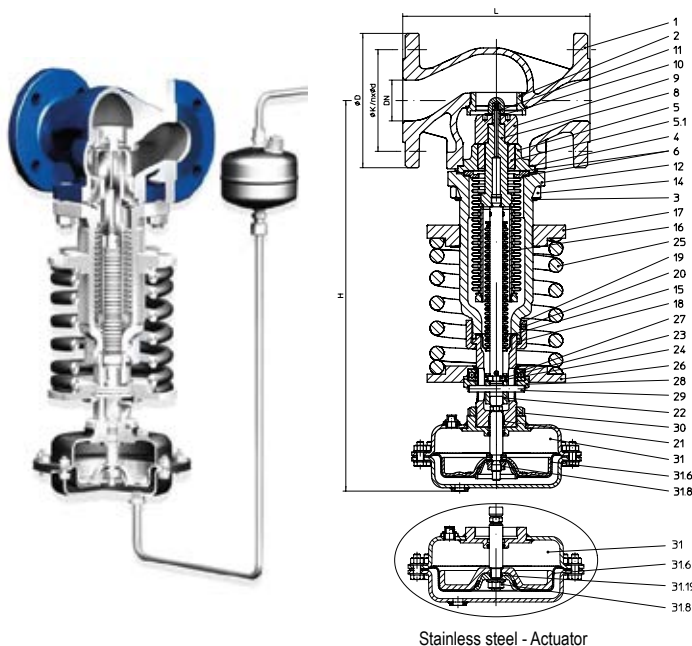
ARI-PREDU®

Fig. 701 / Pressure reducing valve

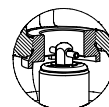


Your valve made by ARI®
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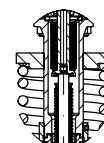
Straight through with diaphragm actuator DMA



Plug DN 15 - 32



Plug DN 40 - 150



Bellows seal DN 15 - 40

Figure	Nominal pressure	Material	Nominal diameter	Downstream-pressure ranges	Actuator
12.701	PN16	EN-JL1040	DN15-150	0,2 - 16 barg	DMA 400 DMA 250 DMA 160 DMA 80 DMA 40
22.701	PN16	EN-JS1049	DN15-150		
23.701	PN25	EN-JS1049	DN15-150		
34.701	PN25	1.0619+N	DN15-150		
35.701	PN40	1.0619+N	DN15-150		
62.701	PN16	1.4581	DN15-150		
65.701	PN40	1.4581	DN15-150		

Parts						
Pos.	Sp.p.	Description	Fig. 12.701	Fig. 22.701 Fig. 23.701	Fig. 34.701 Fig. 35.701	Fig. 62.701 Fig. 65.701
1		Body	EN-JL1040, EN-GJL-250	EN-JS1049, EN-GJS-400-18U-LT	GP240GH+N, 1.0619+N	GX5CrNiMoNb19-11-2, 1.4581
2	x	Screwed seat ring	X20Cr13+QT, 1.4021+QT			X6CrNiMoTi17-12-2, 1.4571
3		Stud	25CrMo4, 1.7218 -A2B			A4-70
4	x	Gasket	Pure graphite (CrNi laminated with graphite)			
5		Bush housing	EN-JS1049, EN-GJS-400-18U-LT			X6CrNiMoTi17-12-2, 1.4571
5.1		Guide bush	X20Cr13+QT, 1.4021+QT			X6CrNiMoTi17-12-2, 1.4571
6	x	Gasket	Pure graphite (CrNi laminated with graphite)			
8	x	Balanced-bellow-unit	X6CrNiMoTi17-12-2, 1.4571 / X5CrNi18-10, 1.4301 / X20Cr13+QT, 1.4021+QT			X6CrNiMoTi17-12-2, 1.4571
9	x	Plug	X20Cr13+QT, 1.4021+QT (hardened)			X6CrNiMoTi17-12-2, 1.4571 (hardened)
10		Washer	A2			A4
11		Hexagon screw	< DN40: A4-70			
11		Head	≥ DN40: X6CrNiTi18-10, 1.4541 / X20Cr13+QT, 1.4021+QT			≤DN50: X6CrNiTi18-10, 1.4541 >DN50: X6CrNiTi18-10, 1.4541 / X6CrNiMoTi17-12-2, 1.4571
12		Bonnet Fig. 700 closed	EN-JS1049, EN-GJS-400-18U-LT			GX5CrNiMoNb19-11-2, 1.4581
14		Hexagon nut	C35E, 1.1181 -A2B			A4-70
15	x	Gasket	Pure graphite (CrNi laminated with graphite)			
16	x	Sealing-bellow-unit	X6CrNiMoTi17-12-2, 1.4571 / X5CrNi18-10, 1.4301 / X20Cr13+QT, 1.4021+QT			X6CrNiMoTi17-12-2, 1.4571
17		Adjusting plate	EN-JS1049, EN-GJS-400-18U-LT			
18		Head	EN-JS1030, EN-GJS-400-15			
19		Screw joint	11SMn30+C, 1.0715+C			
20		Thread pin	45H - A2B			
21		Guide bush	PTFE-25°C			
22		Guide coupling	X20Cr13+QT, 1.4021+QT			
23		Cylindrical balls	102Cr6, 1.2067			
24		Securing wire	X12CrNi17-7, 1.4310			
25	x	Spring	51CrV4, 1.8159			
26		Spring plate	S235JR, 1.0037			
27		Axial bearing	102Cr6, 1.2067			
28		Pressure plate	11SMn30+C, 1.0715+C			
29		Parallel pin	St			
30		Slotted nut	5.8 - A2B			
31	x	P-Actuator	DMA 40-80: EN-GJS-400-18U-LT, EN-JS1049 DMA 160-400: DD13+QZ, 1.0335+QT			X6CrNiMoTi17-12-2, 1.4571
31.6	x	Rolling diaphragm	NBR / EPDM			
31.8	x	Collar nut with sealing ring	8-A2B			--
31.8	x	Hexagon nut with flanges	--			A4
31.19	x	O-Ring	--			NBR / EPDM
L Spare parts						



DN			15	20	25	32	40	50	65	80	100	125	150
Kvs-value													
Kvs-value	standard	(m³/h)	3,2	5	8	12,5	20	32	50	80	125	190	280
	reduced	(m³/h)	0,1 / 0,4 / 1 / 2,5	0,1 / 0,4 / 1 / 2,5 / 4	0,1 / 0,4 / 1 / 2,5 / 4 / 6,3	--	--	--	--	--	--	--	--
Seat-ø		(mm)	18	22	25	32	40	50	65	80	100	125	150
Travel		(mm)	4	5	6	8	8	10	11	13	16	19	22
Max. differential pressure drop		(bar)	40	40	25	25	25	25	20	20	20	16	16
Shutt off class			Leakage class I acc. to DIN EN 1349 or DIN EN 60534-4 (≤ 0,05% from Kvs-value)										

Face-to-face dimension FTF series 1 according to DIN EN 558

L	(mm)	130	150	160	180	200	230	290	310	350	400	480
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Dimensions

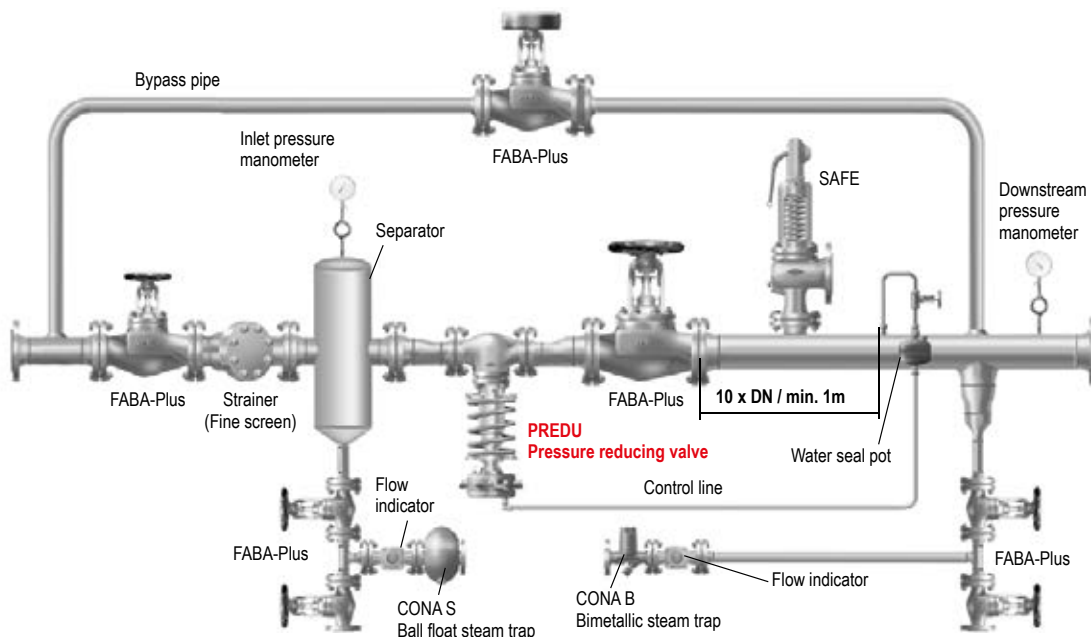
H	DMA 400	(mm)	495	495	500	500	540	540	545	585	610	650	690
	DMA 250	(mm)	455	455	460	460	500	500	505	545	585	610	650
	DMA 160	(mm)	440	440	440	440	480	480	490	530	550	590	630
	DMA 80	(mm)	435	435	440	440	480	480	485	530	550	590	630
	DMA 40	(mm)	435	435	440	440	480	480	485	530	550	590	630

Downstream-pressure ranges

	(barg)	0,2 - 0,6	0,5 - 1,2	0,8 - 2,5	2 - 5	4,5 - 10	8 - 16
Pneumatic Actuator DMA	(cm²)	DMA 400	DMA 250	DMA 160	DMA 80	DMA 40	
Pneumatic Actuator PN-max.	(barg)	1,6	2,5	6	10	20	
Spring end-No.		04	04	07	07	07	10

Pressure-temperature-ratings			Intermediate values for max. permissible operational pressures can be determined by linear interpolation of the given temperature / pressure chart.						
acc. to DIN EN 1092-2			-60°C to <-10°C*	-10°C to 120°C	150°C	200°C	250°C	300°C	350°C
EN-JL1040	PN16	(bar)	--	16	14,4	12,8	11,2	9,6	--
EN-JS1049	PN16	(bar)	on request	16	15,5	14,7	13,9	12,8	11,2
EN-JS1049	PN25	(bar)	on request	25	24,3	23	21,8	20	17,5
acc. to manufacturers standard			-60°C to <-10°C*	-10°C to 120°C	150°C	200°C	250°C	300°C	350°C
1.0619+N	PN25	(bar)	18,7	25	23,9	22	20	17,2	16
1.0619+N	PN40	(bar)	30	40	38,1	35	32	28	25,7
acc. to DIN EN 1092-1			-60°C to <-10°C*	-10°C to 100°C	150°C	200°C	250°C	300°C	350°C
1.4581	PN16	(bar)	8	16	15,6	14,9	14,1	13,3	12,8
1.4581	PN40	(bar)	20	40	39,2	37,3	35,4	33,3	32,1

* Studs and nuts made of A4-70 (at temperatures below -10°C)



ARI-PREDU®

Fig. 701 / Pressure reducing valve



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Actuator / Special designs

Diaphragm-Actuator DMA 400 - DMA 40

- Rolling diaphragm
- Connection through a central thread
- Spindle connection with a fast coupling
- Delivered with a flow restrictor and 90°-elbow

Material (Diaphragm):

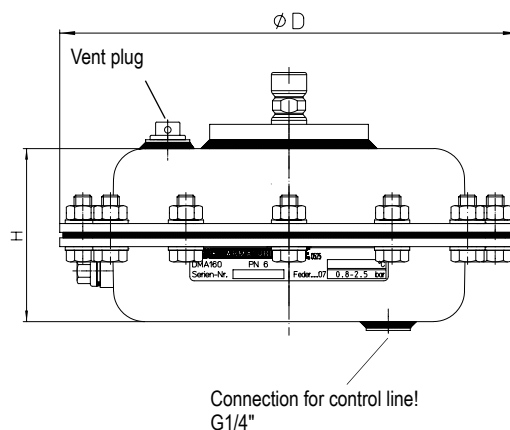
EPDM -40°C to +130°C

NBR -40°C to +100°C

Selection of possible applications:

- Neutral gases, Vapours and liquids
(only fluids of group II acc. to Pressure Equipment Directive 2014/68/EU)

Pneumatic Actuator		DMA 400	DMA 250	DMA 160	DMA 80	DMA 40
ØD	(mm)	300	250	210	170	140
H	(mm)	135	90	80	75	75
Weight	(kg)	13,4	8,1	5,1	3,7	2,9



Water seal pot

(for media temperatures higher than the allowed diaphragm temperature)

- Delivered with a funnel

Material:

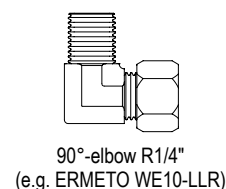
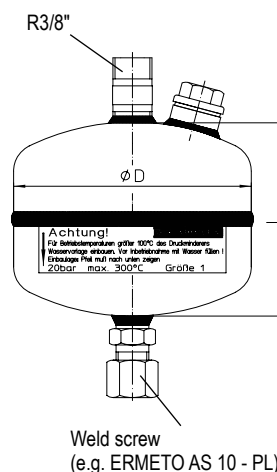
Standard design: P265 GH, 1.0425

Stainless steel version: X6CrNiMoTi17-12-2, 1.4571

Selection of possible applications:

- Steam
- Hot water
- Neutral liquids

Pneumatic Actuator		DMA 400	DMA 250	DMA 160	DMA 80	DMA 40
Size		2		1		
ØD	(mm)	140		102		
L	(mm)	110		83		
V	(dm³)	1,2		0,6		



Flow divider for noise reduction



Plug with PTFE soft sealing
(max. 200°C, only for standard Kvs-values)

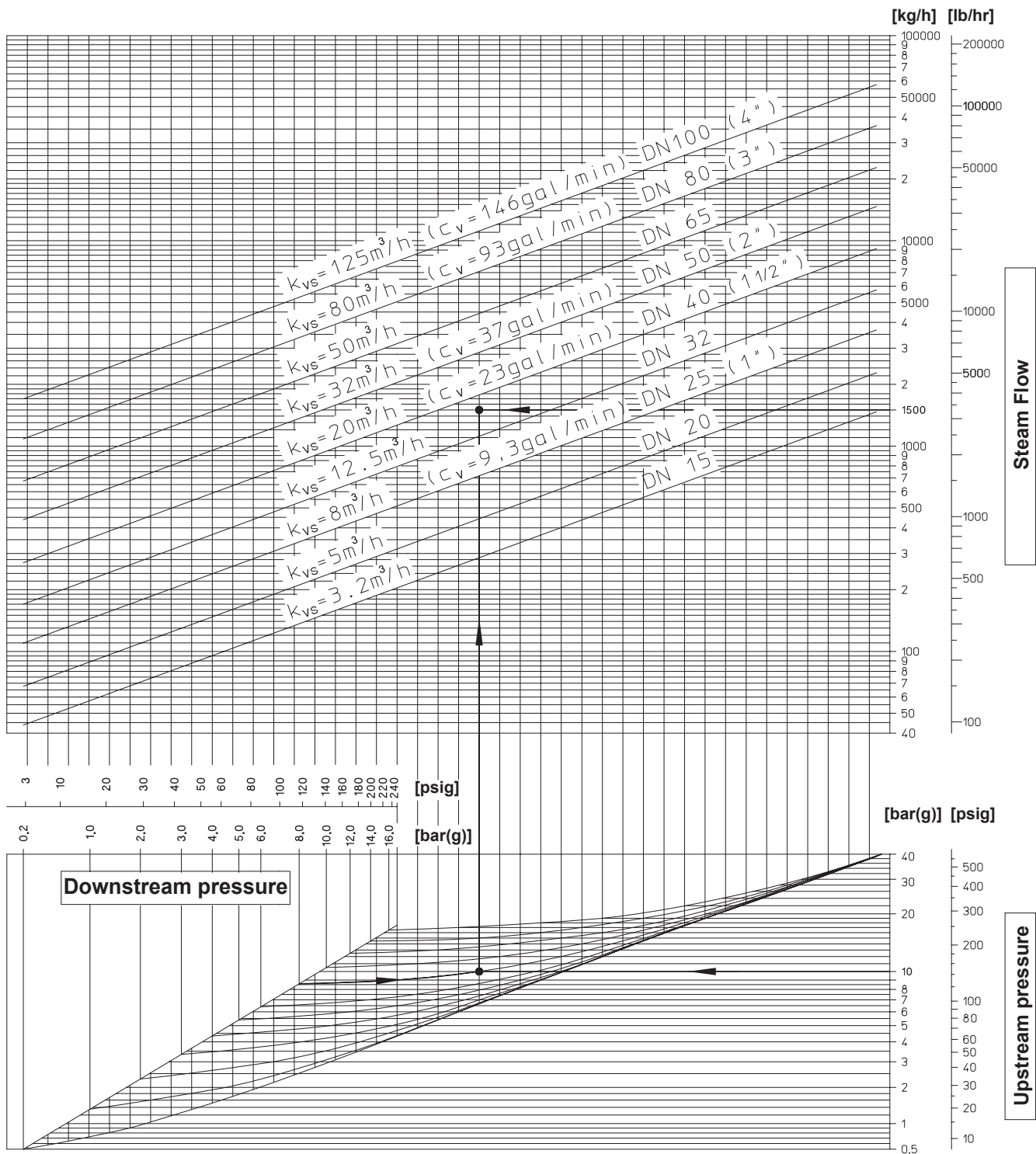
Please indicate when ordering:

- Figure-No.
- Nominal diameter
- Nominal pressure
- Body material
- Plug version
- Kvs-value
- Pressure range
- Actuator
- Special design / accessories

Example:

Figure 35.701; nominal diameter DN 100; nominal pressure PN 40; body material 1.0619+N; metal seal; Kvs 125; 0,8 - 2,5 bar; ARI-DMA 160 with NBR-diaphragm; water seal pot size 1.





Example

Steam flow = 1200 kg/h

Upstream pressure = 10 bar / Downstream pressure = 8 bar

$$1200 \text{ kg/h} \times \text{Factor } 1.25 = 1500 \text{ kg/h}$$

Chosen DN40

