

SEALS AND COUPLING MATERIALS USING TABLE

NBR (Nitrile)	FPM (Viton)	EPDM	PTFE (Teflon)
<p>Main properties: Resistant to oil and petrol good ageing characteristics, high abrasion resistance.</p> <p>Als Dichtungswerkstoffe stehen folgende Serlenqualitäten zur Verfügung: Perbunan, Haupteigenschaften : Beständigkeit gegen Öl und Benzin gute Alterungsbeständigkeit, hoher Schutz gegen Abrieb.</p>	<p>Main properties: Outstanding heat resistant performance, excellent resistance to oils, chemicals, solvent, active oxygen, and weather.</p> <p>Viton, Haupteigenschaften: Übertroffene Hitzebeständigkeit, ausgezeichnete Beständigkeit gegen Öle, Chemikalien, Lösungsmittel, Ozon, Sauerstoff und Witterung.</p>	<p>Main properties Ethylen Propylene, High mechanical strength, excellent resistance to high and low temperatures and to active oxygen and weather. Good resistance to chemical media.</p> <p>EP, Athylen Propylen, Haupteigenschaften: Hohe mechanische Festigkeit. Ausgezeichnete Wärme- und Kältebeständigkeit. Hervorragende Beständigkeit gegen Ozon- und Witterungseinflüsse. Gute chemische Beständigkeit.</p>	<p>For very aggressive media special constructions with PTFE seals (Teflon) are available. Für sehr aggressive Medien sind Sonderkonstruktionen mit PTFE-Dichtungen (Teflon) verfügbar. Alle Angaben sind unverbindlich und dienen nur zur Orientierung. Sie gelten 1. für reine Stoffe, 2. wenn nicht anders angegeben für Flaumtemperatur. 3. bei Säuren, Säuren usw., für wässrige Lösungen mäßiger Konzentrationen. Teflon-eingetragenes 'Dupont'-Warenzeichen.</p>

Symbols - Korrosionstabelle	Material						Seal Dichtung		
	Steel zinc plated Stahl Verzinkt	Brass - Messing	AISI 316 Ti or similar Edelstahl/AISI 316 Ti	Polyamide 11/12 Polyamid 11/12	Polyacetal - Poliasetal	NBR Nitrile	FPM Viton	EPDM	
✓ Fully resistant / beständig D Partly resistant / bedingt — Non-resistant / nicht									
Acetate (Ethyl Acetate & Amyl Acetate)	✓	✓	✓	✓	✓			X	
Acetic acid 10%		—	✓	—	✓			X	
Acetone	✓	✓	✓	✓	✓			X	
Acetylene	✓	✓	✓	✓	✓	X	X	X	
Aero Engine Fuel BP, Esso Avgas100/130	✓	✓	✓	✓	D	X	X		
Aero Engine Oil BP : AIRO 1210, Esso: AVIATON-120 Shell: AIRO-120, DERD 2487 DERD 2497, DTD 585	✓	✓	✓	✓	D	X	X		
Skydrol	✓	—	✓	—	—			X	
Oronite	✓	—	✓	—	—		X		
Air, compressed	✓	✓	✓	✓	✓	X	X		
Air, hot up to 120°C	✓	✓	✓	D	—		X	X	
Air, hot up to 200°C	✓	✓	✓	—	—		X		
Alcohol	✓	✓	✓	✓	✓		X		
Alum		—	✓	—	✓	X	X	X	
Alkalies	—	D	✓	✓	D	X		X	
Ammonia, Liquid	D	—	✓	✓	—			X	
Ammonium Sulphate Solution	—	—	✓	✓	D	X	X	X	
Amyl Alcohol	✓	✓	✓	✓	✓		X		
Aniline	✓	—	✓	D	—		X		
Benzole	✓	✓	✓	✓	✓		X		
Borax	✓	✓	✓	—	—		X	X	
Bultane	✓	✓	✓	✓	✓	X	X		
Bultane	✓	—	✓	—	—	X	X		
Butyl Alcohol	—	✓	✓	✓	✓			X	
Carbon Dioxide	—	✓	✓	✓	✓	X	X	X	
Carbon Dioxide, dry		✓	✓	✓	—	X	X	X	
Carbon Dioxide liquid	—	✓	✓	✓	D	X	X	X	
Carbon Bisulphide	✓	—	✓	—	—		X		
Chloride of Barium		✓	D	✓	✓	X	X	X	
Chromic Acid	—	—	D	D	—		X		
Citric Acid	—	D	✓	—	D		X	X	
Creosote	✓	—	✓	—	—		X		
Cresol	D	✓	✓	—	—		X		
Cresol, Cresylic Acid	✓	—	✓	—	—		X		
Cupric Chloride	✓	—	D	—	—	X	X	X	
Cyclohexane	✓	—	✓	D	✓		X		
Dimethylamine	✓	—	✓	—	—		X		
Emulsion. (Water/Oil)	D	✓	✓	✓	✓	X	X		
Ether	✓	✓	✓	✓	✓		X		

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✓ Fully resistant / beständig D Partly resistant / bedingt — Non-resistant / nicht									
Ethyl Alcohol	✓	✓	✓	✓	✓	X		X	
Ethylene	✓	✓	✓	✓	✓		X		
Formalin	✓	✓	✓	—	D	X	X	X	
Formic Acid	—	D	✓	—	—			X	
Frigen	✓	✓	✓	✓	✓	X	X		
Gasoline, Refined	✓	—	✓	—	—	X	X		
Gas, Blast Furnace	D	✓	✓	—	D		X		
Gas, Coal	D	✓	✓	✓	✓		X		
Gas, Coke Oven	D	✓	✓	D	D	X			
Gas, Lighting	✓	✓	✓	✓	✓	X	X		
Gas, Naphtalene content	✓	✓	✓	✓	D	X	X		
Gas, Natural	✓	✓	✓	✓	✓	X	X		
Gas, Town	✓	✓	✓	✓	✓	X			
Gear Oil	✓	—	✓	—	—	X	X		
Glucose		✓	✓	✓	✓	X	X	X	
Glycerine	✓	✓	✓	✓	✓	X	X	X	
Glycol	✓	✓	✓	✓	✓	X		X	
Helium	✓	✓	✓	✓	✓	X	X	X	
Hexane	✓	—	✓	✓	D	X	X		
Hydrocarbons	✓	✓	✓	✓	✓	X	X		
Hydrogen	✓	✓	✓	✓	D	X	X		
Hydrogen Gas	✓	—	✓	—	—	X	X		
Hydrogen Sulphide, Humid		D	✓	✓	—			X	
Hydrogen Sulphide, dry		✓	✓	—	✓			X	
Hydrogen Peroxide 30%	—	—	✓	✓	—		X		
Isopropyl Alcohol	✓	—	✓	D	✓	X	X	X	
Kerosene, JP 1	✓	✓	✓	✓	✓	X	X		
Keton, Methyl Ethyl	✓	✓	✓	✓	✓			X	
Latex, liquid up to 130°C	✓	✓	✓	D	D	X			
Lubricating Oil	✓	✓	✓	✓	✓	X	X		
Lye, Caustic	—	✓	✓	—	D			X	
Lye, Hyochorous Acid	—	—	✓	—	D				
Lye, Pickling	—	MS60	✓	D	D		X		
Magnesium Carbonate	✓	—	✓	✓	✓	X	X	X	
Magnesium Hydroxide	✓	✓	✓	✓	✓	X	X	X	
Magnesium Sulphate. M.Sulfat		—	✓	✓	✓	X	X	X	
Mercury	✓	—	✓	✓	✓	X	X	X	
Methane	✓	✓	✓	✓	✓	X	X		
Methanol	✓	✓	✓	✓	✓	X		X	
Methyl Alcohol	✓	✓	✓	D	✓	X		X	
Methyl Ethyl Ketone	✓	—	✓	✓	✓			X	

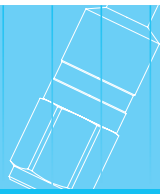
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Symbols - Korrosionstabelle	Material					Seal Dichtung		
<p>✓ Fully resistant / beständig D Partly resistant / bedingt — Non-resistant / nicht</p>	Steel zinc plated Stahl Verzinkt	Brass - Messing	AISI 316 Ti or similar Edelstahl/AISI 316 Ti	Polyamide 11/12 Polyamid 11/12	Polyacetal - Poliasetal	NBR Nitrile	FPM Viton	EPDM
	Methyl Benzene	✓	—	✓	✓	✓	X	
Milk	✓	—	✓	✓	✓	X	X	X
Napta	✓		✓	✓	✓	X	X	
Naptalene	✓	✓	✓	✓	✓		X	
Naptenic. Acid	✓		✓			X	X	
Nitrate of Ammonium	✓		✓			X	X	X
Nitric Acid. up to 35°C	—	✓	✓	—	—		X	
Nitrogen	✓	✓	✓	✓	✓	X	X	X
Nitro-Solution (no synthetic resin thinners)	✓	✓	✓	—	✓			X
Oil, Coal Tr	✓		✓	✓	D		X	
Oil, Crude	✓	✓	✓	✓	✓	X	X	
Oil, Diesel	✓	✓	✓	✓	✓	X		
Oil, Diesel up to 120°C		✓	✓	D	—		X	
Oil, Fuel up to 100°C	✓	✓	✓	D	—	X	X	
Oil, up to 200°C/ 300°C up to (special type)	✓	D	✓	—	—		FFKM	
Oil, Fuel 5x5	✓	✓	✓	D	✓		X	
Oil, Hydraulic Chlorinated	D	D	✓	—	D		X	
Oil, Hydraulic up to 120°C	✓	✓	✓	D	D	X	X	
Oil, Linseed	✓	✓	✓	✓	✓	X	X	
Oil, Mineral	D	✓	✓	✓	✓	X	X	
Oil, Transformer	D	D	✓	✓	D	X		
Oleic Acid	✓	—	✓	✓	✓	X	X	
Oxalic Acid	D	D	✓	✓	✓		X	X
Oxygen. fat free	—	✓	✓	✓	D			X
Paraffin	✓	✓	✓	✓	✓	X		
Paraffin, (Wax)	✓	✓	✓	✓	✓	X		
Pentachlorophenole	✓						X	
Petrol Ether		✓	✓	✓	✓	X		
Petrol	✓	✓	✓	✓	✓	X		
Phenol Solution	D	✓	✓	—	—			
Phosphoric Acid 10%			✓	—	—	X	X	
Potassium Cyanide	✓	—	✓	✓	D	X	X	
Potassium Dichromate	✓	—	✓	—	D	X	X	
Potassium Sulphate	✓		✓			X	X	X
Potassium Hydroxide	✓		✓	✓	D			X
Propane	✓	✓	✓	✓	✓	X	X	
Prussic Acid	✓	—	✓				X	
Salt Solution	—	D	D	✓	D		X	
Sea Water		—	D		✓	X	X	X

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	Soap Solution	—	✓	✓	✓	✓	X	X
Soap Solution	—	D	✓	✓	✓	D	X	X
Sodium Acetate			✓	✓	✓	X		X
Sodium Bicarbonate			D	✓	✓		X	X
Sodium Carbonate	✓		✓	✓	✓	X	X	X
Sodium Chloride	✓		✓	✓	✓	X	X	X
Sodium Cyanide	✓		✓	—	D			X
Sodium Sulphide	✓	D	✓				X	X
Steam, up to 150°C	D	D	✓	—	—			X
Steam, up to 250°C	D	D	✓	—	—			PTFE
Sulphide of barium	✓	D	✓	✓		X	X	X
Sulphur Dixide, Gas		✓	✓					X
Sulphuret of Carbon		✓	✓	—	✓		X	
Syntetic Resin Thinners (no nitrosolution)	✓	✓	✓	D	D		X	
Tar	✓	✓	✓	✓	✓	X	X	
Tetrachloride of Titanium	✓		✓				X	
Toluol, dry	D	✓	✓	✓	✓		X	
Trichlorethylene	✓	D	✓	✓	—		X	
Turbine Fuel, BP: ATK 2494, ES-SO:MIL-F56/16, SHELL:ATF 650	✓	✓	✓	✓	D	X	X	
Turbine Oil, Esso:35	✓	✓	✓	✓	D	X	X	
Turb-oil 1 S (MILL 7808)	D	D	✓	✓	D	X	X	
Vacuum (Strengthened Valve Springs)	✓	✓	✓	✓	✓			
Vegetable Oil	✓		✓	✓	✓	X	X	X
Water, Distilled			✓	✓	✓		X	X
Water, Deionized			✓			X	X	
Water, Demineralised			✓				X	
Water, up to 80°C	D	✓	✓	D	D	X	X	X
Water, over 80°C	D	✓	✓	D	—		X	X
Water, Cooling	D	D	✓	✓	D		X	X
Xylene	✓	✓	✓	✓	✓		X	





QUICK CONNECT TECHNOLOGY



450.08



450.08 - SV 2-Stage

QUICK COUPLINGS FOR PNEUMATIC



Compatible - Kompatibilität

170.08
171.08
173.08
451.08
461.08 / SC-E1

Temperature Range - Temperaturbereich

Nitrile (N) -20°C + 110°C (-4°F + 230°F)
FPM (V) -20°C + 180°C (-4°F + 356°F)
EPDM (Ethylene Propylene) -40°C + 150°C (-40°F + 302°F)

Working Pressure - Betriebsdruck

25 Bar (360 PSI)

Connction / Disconnection Max. Pressure -

Ein- und Auskuppelbar bis Max. Druck
15 Bar (220 PSI)

Flow size - Nennweite

450.08 8mm (3/8")

Standard version - Standardversion

Seals - Dichtung : Nitrile (N)

Material of steel version / Material für die Stahl Version

Socket Body - Kupplungsgrundkörper	Steel tenifer threated Stahl teneferiert
Back Part - Hinterteil	Steel zinc nickel plated Stahl Zink-Nickel beschichtet
Sleeve - Hülse	Steel zinc-nickel plated and orange painted Stahl Zink-Nickel beschichtet und orange lackiert
Springs - Federn	Stainless steel - Edelstahl
Seals - Dichtungen	Nitrile (N)
Plug - Nippel	Steel tenifer threated Stahl teneferiert

Advantages

- The system perfectly fits to the **ISO 4414, EN 983** safety requirements.
- Plug profile perfectly fits to the **ISO 6150-C-14, AFNOR C-14 NF E 49-053**
- 2 stage disconnection safety feature
- Negligible Connecting Force
- Smart and Ergonomic features
- Ease of Handling
- Optimised Size

Vorteil

- Sicherheit gemäß **ISO 4414, EN 983**
- Stecknippel gemäß **ISO 6150-C-14, AFNOR C-14 NF E 49-053**
- 2 stufen Sicherheitsentriegelung
- Einfache Bedienung, sehr geringe Kuppelkraft
- Kompakte Bauform

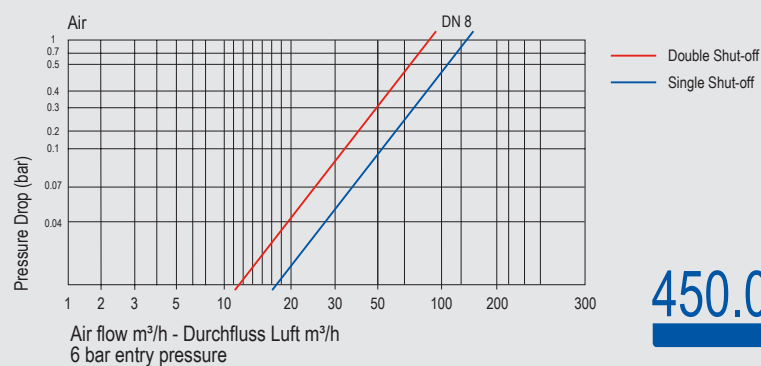
Material of stainless steel version

Material für die Edelstahlversion

Socket Body - Kupplungsgrundkörper	Stainless steel Edelstahl
Back Part - Hinterteil	Stainless steel - Edelstahl
Sleeve - Hülse	Stainless steel - Edelstahl
Springs - Federn	Stainless steel - Edelstahl
Seals - Dichtungen	FPM (V)
Plug - Nippel	Stainless steel - Edelstahl



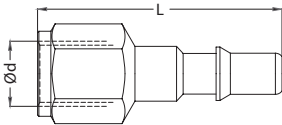
Flow Rate vs Pressure Drop Graph



450.08 - SV 2-Stage

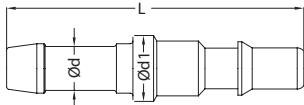
QUICK COUPLINGS FOR PNEUMATIC

Female thread plug / Nippel mit Innengewinde 450.08

Plug / Nippel	Size / Größe	Alternative Order No Alternative Bestellnr.	Order No / Bestellnr.	Ød	Ød1	L	L1	HEX.
	8	R255 00 103	H102.3034	BSP 1/4	-	55.5	-	17
	8	R255 00 105	H102.3035	BSP 3/8	-	57.5	-	22
	8	-	H102.3760	BSP 1/2	-	59	-	27
	8	R255 00 104	H102.3036	NPT 1/4	-	56.5	-	17
	8	R255 00 106	H102.3037	NPT 3/8	-	57.5	-	22
	8	-	H102.3795	NPT 1/2	-	61	-	27
	8	R355 00 088	H102.3682	BSP 1/4	-	55.5	-	17
	8	R355 00 089	H102.3686	BSP 3/8	-	57.5	-	22
	8	-	H102.3688	BSP 1/2	-	59	-	27
	8	R355 00 094	H102.3732	NPT 1/4	-	56.5	-	17
	8	R355 00 095	H102.3736	NPT 3/8	-	57.5	-	22
	8	R355 00 359	H102.3740	NPT 1/2	-	61	-	27

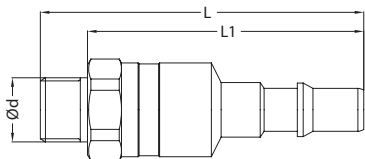
*SS: Stainless Steel / Edelstahl

Standard hose plug / Nippel mit Schlauchanschluss 450.08

Plug / Nippel	Size / Größe	Alternative Order No Alternative Bestellnr.	Order No / Bestellnr.	Ød	Ød1	L	L1	HEX.
	8	R255 00 107	H102.3038	Ø8 - 5/16	15	62	-	-
	8	R255 00 108	H102.3039	Ø10 - 3/8	15	62	-	-
	8	R255 00 109	H102.3040	Ø13 - 1/2	17	66	-	-
	8	R255 00 110	H102.3041	Ø16 - 5/8	19	66	-	-
	8	R355 00 096	H102.3769	Ø8 - 5/16	15	62	-	-
	8	R355 00 097	H102.3771	Ø10 - 3/8	15	62	-	-
	8	R355 00 098	H102.3773	Ø13 - 1/2	17	66	-	-
	8	R355 00 099	H102.3775	Ø16 - 5/8	19	66	-	-

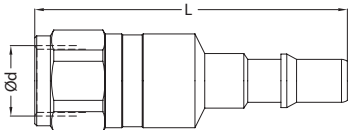
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Male thread plug with valve / Verschlussnippel mit Aussengewinde 450.08

Plug / Nippel	Size / Größe	Alternative Order No Alternative Bestellnr.	Order No / Bestellnr.	Ød	Ød1	L	L1	HEX.
	8	R253 00 159	H102.3777	BSP 3/8	-	86	74	24
	8	-	H102.3781	BSP 1/2	-	88	74	24
	8	-	H102.3797	NPT 3/8	-	88	74	24
	8	R353 00 102	H102.3779	BSP 3/8	-	86	74	24
	8	-	H102.3783	BSP 1/2	-	88	74	24
	8	R353 00 315	H102.3799	NPT 3/8	-	88	74	24

*SS: Stainless Steel / Edelstahl

Female thread plug with valve / Verschlussnippel mit Innengewinde 450.08

Plug / Nippel	Size / Größe	Alternative Order No Alternative Bestellnr.	Order No / Bestellnr.	Ød	Ød1	L	L1	HEX.
	8	R253 00 157	H102.3752	BSP 3/8	-	80	-	24
	8	-	H102.3756	BSP 1/2	-	82	-	24
	8	-	H102.3791	NPT 3/8	-	80	-	24
	8	R353 00 100	H102.3754	BSP 3/8	-	80	-	24
	8	-	H102.3758	BSP 1/2	-	82	-	24
	8	R353 00 314	H102.3793	NPT 3/8	-	80	-	24

*SS: Stainless Steel / Edelstahl

Standard hose plug with valve / Verschlussnippel mit Schlauchanschluss 450.08

Plug / Nippel	Size / Größe	Alternative Order No Alternative Bestellnr.	Order No / Bestellnr.	Ød	Ød1	L	L1	HEX.
	8	R253 00 161	H102.3761	Ø10 - 3/8	-	97	-	24
	8	R253 00 163	H102.3765	Ø13 - 1/2	-	100	-	24
	8	R353 00 104	H102.3763	Ø10 - 3/8	-	97	-	24
	8	R353 00 106	H102.3767	Ø13 - 1/2	-	100	-	24

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